SCORE Search Results Details for Application 10684209 and Search Result us-10-684-209-2.rag.

Score Home Page Retrieve Application List SCORE System Overview SCORE FAQ Comments / Suggestions

This page gives you Search Results detail for the Application 10684209 and Search Result us-10-684-209-2.rag.

start

Go Back to previous page

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                         GenCore version 5.1.9
                Copyright (c) 1993 - 2006  Biocceleration Ltd.


OM protein - protein search, using sw model

Run on:         September  7, 2006, 00:01:43 ; Search time 197 Seconds
                                          (without alignments)
                                          278.507 Million cell updates/sec

Title:          US-10-684-209-2
Perfect score:  663
Sequence:       1 AQGDCDPEAPMTEGTRCCRQ..........RVQKCSCASDGALVPRRLQP 120

Scoring table:  BLOSUM62
                Gapop 10.0 , Gapext 0.5

Searched:       2589679 seqs, 457216429 residues

Total number of hits satisfying chosen parameters:      2589679

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :       A_Geneseq_8:*
                1:  geneseqp1980s:*
                2:  geneseqp1990s:*
                3:  geneseqp2000s:*
                4:  geneseqp2001s:*
                5:  geneseqp2002s:*
                6:  geneseqp2003as:*
                7:  geneseqp2003bs:*
                8:  geneseqp2004s:*
                9:  geneseqp2005s:*
                10:  geneseqp2006s:*

      Pred. No. is the number of results predicted by chance to have a
      score greater than or equal to the score of the result being printed,
      and is derived by analysis of the total score distribution.

                                    SUMMARIES
                %
Result          Query
   No.    Score Match Length DB  ID                    Description
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      1      663  100.0     120   2  AAW93160                     Aaw93160 Human Lef
      2      663  100.0     366   2  AAY17871                     Aay17871 Human bon
      3      663  100.0     366   4  AAB19837                     Aab19837 Endometri
      4      663  100.0     366   4  AAB95157                     Aab95157 Human pro
      5      663  100.0     366   5  AAU79520                     Aau79520 Human end
      6      663  100.0     366   5  AAU79521                     Aau79521 Human end
      7      663  100.0     366   5  AAU79519                     Aau79519 Human end
      8      663  100.0     366   5  AAE25572                     Aae25572 Endometri
      9      663  100.0     366   8  ADO22289                     Ado22289 Human end
     10      663  100.0     366   8  ABO84462                     Abo84462 Human can
     11      656   98.9     294   4  AAB35940                     Aab35940 TGF-beta
     12      656   98.9     370   3  AAY92013                     Aay92013 Human tra
     13      656   98.9     370   5  AAU77104                     Aau77104 Human tra
     14      649   97.9     120   2  AAW93159                     Aaw93159 Human Lef
     15      649   97.9     366   2  AAY17870                     Aay17870 Human bon
     16      643   97.0     308   5  ABP41932                     Abp41932 Human ova
     17      643   97.0     366   2  AAY05287                     Aay05287 EGF-like
     18      643   97.0     366   2  AAY13363                     Aay13363 Amino aci
     19      643   97.0     366   2  AAY03850                     Aay03850 Human lef
     20      643   97.0     366   3  AAY88575                     Aay88575 Human PRO
     21      643   97.0     366   3  ADC78434                     Adc78434 Human PRO
     22      643   97.0     366   4  AAB80231                     Aab80231 Human PRO
     23      643   97.0     366   4  AAB68600                     Aab68600 PRO317. 4
     24      643   97.0     366   5  ABG96362                     Abg96362 Human ova
     25      643   97.0     366   5  AAE28182                     Aae28182 Human Lef
     26      643   97.0     366   6  ABU71609                     Abu71609 Human PRO
     27      643   97.0     366   6  ABU71464                     Abu71464 Human PRO
     28      643   97.0     366   6  ABU71910                     Abu71910 Human sec
     29      643   97.0     366   6  ABO01793                     Abo01793 Novel hum
     30      643   97.0     366   6  ABU54366                     Abu54366 Human sec
     31      643   97.0     366   6  ABO47381                     Abo47381 Human sec
     32      643   97.0     366   6  ABU64518                     Abu64518 Human sec
     33      643   97.0     366   6  ABU67364                     Abu67364 Human sec
     34      643   97.0     366   6  ABO14884                     Abo14884 Human sec
     35      643   97.0     366   6  ABU69641                     Abu69641 Novel hum
     36      643   97.0     366   6  ABO14823                     Abo14823 Human sec
     37      643   97.0     366   6  ADB29319                     Adb29319 Human sec
     38      643   97.0     366   6  ADA18175                     Ada18175 Human sec
     39      643   97.0     366   6  ABO32775                     Abo32775 Human sec
     40      643   97.0     366   6  ABO34835                     Abo34835 Human PRO
     41      643   97.0     366   6  ADA16150                     Ada16150 Human sec
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     45      643   97.0     366   7  ADA13003                     Ada13003 Human sec

                                  ALIGNMENTS


RESULT 1
AAW93160
ID   AAW93160 standard; protein; 120 AA.
XX
AC   AAW93160;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Human Lefty-2 protein fragment.
XX
```

```
KW   Lefty-2; human; growth differentiation factor; detection; ovarian; colon;
KW   treatment; cell proliferative disorder; immunological disorder; disease;
KW   muscle; musculodegenerative disorder; tissue repair; burn; contraceptive;
KW   premature labour; fetal growth; cancer; gonadal; adrenal; tumour;
KW   endometrial.
XX
OS   Homo sapiens.
XX
PN   WO9906443-A1.
XX
PD   11-FEB-1999.
XX
PF   24-JUL-1998;   98WO-US015174.
XX
PR   31-JUL-1997;   97US-0054381P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
XX
PI   Lee S,  Huynh TV,  Sebald S;
XX
DR   WPI; 1999-153703/13.
DR   N-PSDB; AAX22359.
XX
PT   A new growth differentiation factor, Lefty-2 - useful to detect and treat
PT   cell proliferative and immunological disorders.
XX
PS   Example 1; Fig 1; 38pp; English.
XX
CC   This sequence represents a novel human growth differentiation factor,
CC   Lefty-2. Molecules of the invention may be used to detect or treat cell
CC   proliferative or immunological disorders, including disease processes
CC   involving muscle such as musculodegenerative disorders or tissue repair
CC   following trauma or burns, in contraceptive regimens, to prevent
CC   premature labour, to enhance fetal growth or development, or to treat
CC   various cancers including gonadal and adrenal tumours, endometrial and
CC   ovarian tumours and colon cancer
XX
SQ   Sequence 120 AA;

  Query Match             100.0%;  Score 663;  DB 2;  Length 120;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-66;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Db          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120


RESULT 2
AAY17871
ID   AAY17871 standard; protein; 366 AA.
XX
AC   AAY17871;
XX
DT   20-AUG-1999  (first entry)
XX
DE   Human bone morphogenic protein BMP-18.
```

```
XX
KW   Human; bone morphogenic protein; BMP-17; BMP-18; cartilage; tendon;
KW   connective tissue defect; ligament; meniscus; wound healing; growth;
KW   differentiation; epidermis; muscle; nerve; cardiac muscle.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .135
FT                   /label= pro-peptide
FT   Protein         136. .366
FT                   /label= BMP-18
XX
PN   WO9929718-A2.
XX
PD   17-JUN-1999.
XX
PF   17-NOV-1998;   98WO-US024613.
XX
PR   10-DEC-1997;   97US-00987904.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Celeste AJ,  Murray BL;
XX
DR   WPI; 1999-385570/32.
DR   N-PSDB; AAX80214.
XX
PT   New Purified bone morphogenic protein-17 and -18 (BMP-17 and BMP-18)
PT   polypeptides, useful for the induction of growth and/or differentiation
PT   of undifferentiated embryonic and stem cells.
XX
PS   Claim 20; Page 38-39; 39pp; English.
XX
CC   The present sequence is a human bone morphogenic protein designated BMP-
CC   18. BMP proteins are useful for the induction of growth and/or
CC   differentiation of undifferentiated embryonic and stem cells, and for the
CC   treatment of bone, cartilage and other connective tissue defects
CC   including tendons, ligaments and meniscus, in wound healing and related
CC   tissue repair, and for treatment of disorders and defects to tissues
CC   which include epidermis, nerve, muscle, including cardiac muscle, and
CC   other tissues and wounds, and organs such as liver, lung, epithelium,
CC   brain, spleen, cardiac, pancreas and kidney tissue. DNA encoding BMP
CC   proteins can be useful as probes to detect expression of BMP proteins,
CC   and the vectors containing DNA encoding BMP proteins are useful for
CC   delivery of the BMP proteins to cells of a patient
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 2;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366
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RESULT 3
AAB19837
ID   AAB19837 standard; protein; 366 AA.
XX
AC   AAB19837;
XX
DT   05-MAR-2001  (first entry)
XX
DE   Endometrial bleeding associated factor (ebaf) protein.
XX
KW   Endometrial bleeding associated factor; ebaf; human; chromosome 1q42.1;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   Huntington's chorea; dementia; amyotrophic lateral sclerosis;
KW   Pick's disease; therapy.
XX
OS   Homo sapiens.
XX
PN   WO200066068-A2.
XX
PD   09-NOV-2000.
XX
PF   28-APR-2000; 2000WO-US011623.
XX
PR   29-APR-1999;   99US-00302094.
XX
PA   (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
XX
PI   Tabibzadeh S;
XX
DR   WPI; 2001-040876/05.
DR   N-PSDB; AAA88913.
XX
PT   Inducing growth and enhancing survival of nervous tissue by contacting
PT   with endometrial bleeding associated factor protein.
XX
PS   Disclosure; Fig 2; 23pp; English.
XX
CC   The present sequence is that of human endometrial bleeding associated
CC   factor (ebaf). A claimed method for inducing growth and enhancing
CC   survival of nervous tissue comprises contacting the tissue with ebaf or a
CC   nucleic acid encoding ebaf in vitro or in vivo. The method can be used to
CC   treat damaged or degenerated nervous tissue resulting from injury
CC   associated with trauma, diabetes, kidney dysfunction, ischaemia or use of
CC   therapeutic agents, or to treat a neurodegenerative disease such as
CC   Alzheimer's disease, Parkinson's disease, Huntington's chorea,
CC   amyotrophic lateral sclerosis, dementia, or Pick's disease (all claimed)
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 4;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366
```

```
RESULT 4
AAB95157
ID   AAB95157 standard; protein; 366 AA.
XX
AC   AAB95157;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human protein sequence SEQ ID NO:17194.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-00116126.
XX
PR   29-JUL-1999;   99JP-00248036.
PR   27-AUG-1999;   99JP-00300253.
PR   11-JAN-2000; 2000JP-00118776.
PR   02-MAY-2000; 2000JP-00183767.
PR   09-JUN-2000; 2000JP-00241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT   length cDNAs defined in the specification, and for the detection and/or
PT   diagnosis of the abnormality of the proteins encoded by the full-length
PT   cDNAs.
XX
PS   Claim 8; SEQ ID NO 17194; 2537pp + Sequence Listing; English.
XX
CC   The present invention describes primer sets for synthesising 5602 full-
CC   length cDNAs defined in the specification. Where a primer set comprises:
CC   (a) an oligo-dT primer and an oligonucleotide complementary to the
CC   complementary strand of a polynucleotide which comprises one of the 5602
CC   nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in the
CC   specification. The primer sets can be used in antisense therapy and in
CC   gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC   represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC   oligonucleotides, all of which are used in the exemplification of the
CC   present invention
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 4;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 5
AAU79520
ID   AAU79520 standard; protein; 366 AA.
XX
AC   AAU79520;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human endometrial bleeding associated factor (ebaf) mutant R74G/R77G.
XX
KW   Human; endometrial bleeding associated factor; ebaf; lefty-A;
KW   transforming growth factor beta; TGF-beta; Smad; transcription factor;
KW   chromosome 1q42.1; retinoic acid; oestrogen; progesterone; fibrosis;
KW   scar; cirrhosis; Asherman's syndrome; Meigs' syndrome; scleroderma;
KW   autoimmune disorder; muscular dystrophy; Hamman Rich Syndrome;
KW   cell proliferation; hyperplasia; neoplasia; cancer; tumour; carcinoma;
KW   leukemia; lymphoma; melanoma; sarcoma; coagulation; menstrual bleeding;
KW   uterine bleeding; coagulopathy; toxaemia; pregnancy; glomerular disease;
KW   hydronephrosis; hepatomegaly; splenomegaly; lipodystrophy;
KW   insulin resistance; hypertriglyceridaemia; hypermetabolic state; mutant;
KW   mutein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key              Location/Qualifiers
FT   Misc-difference 74
FT                    /note= "Wild-type Arg substituted by Gly"
FT   Misc-difference 77
FT                    /note= "Wild-type Arg substituted by Gly"
FT   Region           137. .366
FT                    /note= "Can also exist as a 28kD form"
XX
PN   WO200229105-A1.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US030872.
XX
PR   05-OCT-2000; 2000US-00679971.
XX
PA   (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
```

```
XX
PI   Tabibzadeh S,  Mason JM;
XX
DR   WPI; 2002-352240/38.
XX
PT   Inhibiting the activity of transforming growth factor (TGF) beta, for
PT   treating e.g. fibrosis, comprises contacting tissue expressing TGF beta
PT   with ebaf peptide its analogue.
XX
PS   Disclosure; Page; 54pp; English.
XX
CC   The invention discloses a method of inhibiting the activity of
CC   transforming growth factor (TGF)-beta, comprising contacting tissue
CC   expressing TGF-beta with an effective amount of endometrial bleeding
CC   associated factor (ebaf) peptide, or an ebaf analogue. TGF-beta
CC   expression can also be controlled by contacting the tissue expressing TGF
CC   -beta with a modulator of ebaf, or an ebaf analogue, expression. These
CC   modulators of ebaf expression include retinoic acid, oestrogen and
CC   progesterone. TNF-beta is a pleiotropic peptide that controls the
CC   proliferation of many cell types and modulates the coagulation process by
CC   binding to two receptors and signalling through the Smad family of
CC   transcription factors. To inhibit the activity of TGF-beta, ebaf, or an
CC   ebaf analogue, competes with TGF-beta for binding to TGF-beta receptor
CC   type I. Inhibiting TGF-beta activity is useful for treating a human with
CC   a condition, such as fibrosis, which is associated with overactivity of
CC   TGF-beta. The fibrosis is a scar (resulting from a burn, radiation, or a
CC   chemical or myocardial infarct), a keloid, cirrhosis, Asherman's
CC   syndrome, Meigs' syndrome, a muscular dystrophy (such as Duchenne), an
CC   autoimmune disorder (such as scleroderma), post-surgical fibrosis, or
CC   primary pulmonary fibrosis, (such as Hamman Rich Syndrome or
CC   retroperitoneal fibrosis). The condition may also be a defect in cell
CC   proliferation such as hyperplasia or neoplasia, including cancer,
CC   tumours, carcinomas, leukemias, lymphomas, melanomas and sarcomas, or a
CC   coagulation defect such as menstrual bleeding, abnormal uterine bleeding,
CC   coagulopathy, or toxaemia of pregnancy. Overexpression of TGF-beta has
CC   also been shown to result in glomerular disease, hydronephrosis,
CC   hepatomegaly, splenomegaly, lipodystrophies, insulin resistance,
CC   hypertriglyceridemia and a hypermetabolic state. The protein sequence
CC   presented is mutant of human endometrial bleeding associated factor
CC   (ebaf) which is located on chromosome 1q42.1. The substitution of Gly for
CC   Arg at residues 74 and 77 removes a cleavage site that creates a 34 kD
CC   version of ebaf. Note: The presented sequence is not shown in the
CC   specification but is derived from the human ebaf wild-type sequence
CC   disclosed in figure 2
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 5;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 6
```

```
AAU79521
ID   AAU79521 standard; protein; 366 AA.
XX
AC   AAU79521;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human endometrial bleeding associated factor (ebaf) mutant R132G.
XX
KW   Human; endometrial bleeding associated factor; ebaf; lefty-A;
KW   transforming growth factor beta; TGF-beta; Smad; transcription factor;
KW   chromosome 1q42.1; retinoic acid; oestrogen; progesterone; fibrosis;
KW   scar; cirrhosis; Asherman's syndrome; Meigs' syndrome; scleroderma;
KW   autoimmune disorder; muscular dystrophy; Hamman Rich Syndrome;
KW   cell proliferation; hyperplasia; neoplasia; cancer; tumour; carcinoma;
KW   leukemia; lymphoma; melanoma; sarcoma; coagulation; menstrual bleeding;
KW   uterine bleeding; coagulopathy; toxaemia; pregnancy; glomerular disease;
KW   hydronephrosis; hepatomegaly; splenomegaly; lipodystrophy;
KW   insulin resistance; hypertriglyceridaemia; hypermetabolic state; mutant;
KW   mutein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 132
FT                   /note= "Wild-type Arg substituted by Gly"
XX
PN   WO200229105-A1.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US030872.
XX
PR   05-OCT-2000; 2000US-00679971.
XX
PA   (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
XX
PI   Tabibzadeh S,  Mason JM;
XX
DR   WPI; 2002-352240/38.
XX
PT   Inhibiting the activity of transforming growth factor (TGF) beta, for
PT   treating e.g. fibrosis, comprises contacting tissue expressing TGF beta
PT   with ebaf peptide its analogue.
XX
PS   Disclosure; Page; 54pp; English.
XX
CC   The invention discloses a method of inhibiting the activity of
CC   transforming growth factor (TGF)-beta, comprising contacting tissue
CC   expressing TGF-beta with an effective amount of endometrial bleeding
CC   associated factor (ebaf) peptide, or an ebaf analogue. TGF-beta
CC   expression can also be controlled by contacting the tissue expressing TGF
CC   -beta with a modulator of ebaf, or an ebaf analogue, expression. These
CC   modulators of ebaf expression include retinoic acid, oestrogen and
CC   progesterone. TNF-beta is a pleiotropic peptide that controls the
CC   proliferation of many cell types and modulates the coagulation process by
CC   binding to two receptors and signalling through the Smad family of
CC   transcription factors. To inhibit the activity of TGF-beta, ebaf, or an
CC   ebaf analogue, competes with TGF-beta for binding to TGF-beta receptor
CC   type I. Inhibiting TGF-beta activity is useful for treating a human with
CC   a condition, such as fibrosis, which is associated with overactivity of
CC   TGF-beta. The fibrosis is a scar (resulting from a burn, radiation, or a
CC   chemical or myocardial infarct), a keloid, cirrhosis, Asherman's
CC   syndrome, Meigs' syndrome, a muscular dystrophy (such as Duchenne), an
CC   autoimmune disorder (such as scleroderma), post-surgical fibrosis, or
CC   primary pulmonary fibrosis, (such as Hamman Rich Syndrome or
CC   retroperitoneal fibrosis). The condition may also be a defect in cell
CC   proliferation such as hyperplasia or neoplasia, including cancer,
CC   tumours, carcinomas, leukemias, lymphomas, melanomas and sarcomas, or a
CC   coagulation defect such as menstrual bleeding, abnormal uterine bleeding,
CC   coagulopathy, or toxaemia of pregnancy. Overexpression of TGF-beta has
CC   also been shown to result in glomerular disease, hydronephrosis,
CC   hepatomegaly, splenomegaly, lipodystrophies, insulin resistance,
CC   hypertriglyceridemia and a hypermetabolic state. The protein sequence
CC   presented is mutant of human endometrial bleeding associated factor
CC   (ebaf) which is located on chromosome 1q42.1. The substitution of Gly for
CC   Arg at residue 132 removes a cleavage site that creates a 28 kD version
CC   of ebaf. Note: The presented sequence is not shown in the specification
CC   but is derived from the human ebaf wild-type sequence disclosed in figure
CC   2
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 5;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 7
AAU79519
ID   AAU79519 standard; protein; 366 AA.
XX
AC   AAU79519;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human endometrial bleeding associated factor (ebaf).
XX
KW   Human; endometrial bleeding associated factor; ebaf; lefty-A;
KW   transforming growth factor beta; TGF-beta; Smad; transcription factor;
KW   chromosome 1q42.1; retinoic acid; oestrogen; progesterone; fibrosis;
KW   scar; cirrhosis; Asherman's syndrome; Meigs' syndrome; scleroderma;
KW   autoimmune disorder; muscular dystrophy; Hamman Rich Syndrome;
KW   cell proliferation; hyperplasia; neoplasia; cancer; tumour; carcinoma;
KW   leukemia; lymphoma; melanoma; sarcoma; coagulation; menstrual bleeding;
KW   uterine bleeding; coagulopathy; toxaemia; pregnancy; glomerular disease;
KW   hydronephrosis; hepatomegaly; splenomegaly; lipodystrophy;
KW   insulin resistance; hypertriglyceridaemia; hypermetabolic state.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Region          137. .366
FT                   /note= "Can also exist as a 28kD form"
XX
PN   WO200229105-A1.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US030872.
XX
PR   05-OCT-2000; 2000US-00679971.
XX
PA   (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
XX
PI   Tabibzadeh S,  Mason JM;
XX
DR   WPI; 2002-352240/38.
DR   N-PSDB; ABK48599.
XX
PT   Inhibiting the activity of transforming growth factor (TGF) beta, for
PT   treating e.g. fibrosis, comprises contacting tissue expressing TGF beta
PT   with ebaf peptide its analogue.
XX
PS   Disclosure; Fig 2; 54pp; English.
XX
CC   The invention discloses a method of inhibiting the activity of
CC   transforming growth factor (TGF)-beta, comprising contacting tissue
CC   expressing TGF-beta with an effective amount of endometrial bleeding
CC   associated factor (ebaf) peptide, or an ebaf analogue. TGF-beta
CC   expression can also be controlled by contacting the tissue expressing TGF
CC   -beta with a modulator of ebaf, or an ebaf analogue, expression. These
CC   modulators of ebaf expression include retinoic acid, oestrogen and
CC   progesterone. TNF-beta is a pleiotropic peptide that controls the
CC   proliferation of many cell types and modulates the coagulation process by
CC   binding to two receptors and signalling through the Smad family of
CC   transcription factors. To inhibit the activity of TGF-beta, ebaf, or an
CC   ebaf analogue, competes with TGF-beta for binding to TGF-beta receptor
CC   type I. Inhibiting TGF-beta activity is useful for treating a human with
CC   a condition, such as fibrosis, which is associated with overactivity of
CC   TGF-beta. The fibrosis is a scar (resulting from a burn, radiation, or a
CC   chemical or myocardial infarct), a keloid, cirrhosis, Asherman's
CC   syndrome, Meigs' syndrome, a muscular dystrophy (such as Duchenne), an
CC   autoimmune disorder (such as scleroderma), post-surgical fibrosis, or
CC   primary pulmonary fibrosis, (such as Hamman Rich Syndrome or
CC   retroperitoneal fibrosis). The condition may also be a defect in cell
CC   proliferation such as hyperplasia or neoplasia, including cancer,
CC   tumours, carcinomas, leukemias, lymphomas, melanomas and sarcomas, or a
CC   coagulation defect such as menstrual bleeding, abnormal uterine bleeding,
CC   coagulopathy, or toxaemia of pregnancy. Overexpression of TGF-beta has
CC   also been shown to result in glomerular disease, hydronephrosis,
CC   hepatomegaly, splenomegaly, lipodystrophies, insulin resistance,
CC   hypertriglyceridaemia and a hypermetabolic state. The protein sequence
CC   presented is human endometrial bleeding associated factor (ebaf) which is
CC   located on chromosome 1q42.1
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 5;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 8
AAE25572
ID   AAE25572 standard; protein; 366 AA.
XX
AC   AAE25572;
XX
DT   04-NOV-2002  (first entry)
XX
DE   Endometrial bleeding associated factor (ebaf) protein.
XX
KW   Hair growth; endometrial bleeding associated factor; ebaf; hair loss;
KW   male-pattern baldness; alopecia; non-scarring alopecia; toxic alopecia;
KW   alopecia areata; trichotillomania; scarring alopecia; gene therapy.
XX
OS   Unidentified.
XX
PN   WO200234281-A1.
XX
PD   02-MAY-2002.
XX
PF   17-OCT-2001; 2001WO-US032584.
XX
PR   20-OCT-2000; 2000US-0242314P.
XX
PA   (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
XX
PI   Tabibzadeh S,  Mason JM;
XX
DR   WPI; 2002-547421/58.
DR   N-PSDB; AAD41823.
XX
PT   Promoting hair growth in a subject, useful for preventing or treating
PT   hair loss and all types of alopecia, comprises administering endometrial
PT   bleeding associated factor or its analog, or modulator of their
PT   expression.
XX
PS   Disclosure; Fig 1; 25pp; English.
XX
CC   The invention relates to a method for promoting hair growth in a subject,
CC   by administering endometrial bleeding associated factor (ebaf) or its
CC   analogue, or modulator of the ebaf expression, to promote hair growth in
CC   the subject. The method is useful for promoting hair growth in a subject
CC   who is afflicted with hair loss, that resulted from male-pattern
CC   baldness, or from exposure to radiation, where promoting hair growth
CC   includes generating or inducing hair growth in skin having a complete
CC   absence of hair growth, or effective to assist, enhance, or increase hair
CC   growth in skin having hair growth, and includes preventing or minimising
CC   hair loss, where the skin area of the subject is arms, chest, face, legs
CC   and scalp but is preferably promoted on the scalp, thereby used to
CC   prevent or treat hair loss and all types of alopecia, including, without
CC   limitation, non-scarring alopecia, particularly male-pattern baldness,
CC   toxic alopecia, alopecia areata, trichotillomania and scarring alopecia.
CC   The invention is useful in gene therapy. The present sequence is ebaf
CC   protein
```

```
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 5;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 9
ADO22289
ID   ADO22289 standard; protein; 366 AA.
XX
AC   ADO22289;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human endometrial bleeding associated factor protein (ebaf).
XX
KW   Human; degenerated nervous tissue; embryonic forebrain cell;
KW   endometrial bleeding associated factor; ebaf; proliferation;
KW   neuronal growth; neuronal survival; neurodegenerative disease;
KW   Parkinson's disease; Alzheimer's disease; Huntington's chorea;
KW   amyotrophic lateral sclerosis; antiparkinsonian; nootropic;
KW   neuroprotective; anticonvulsant.
XX
OS   Homo sapiens.
XX
PN   US6747004-B1.
XX
PD   08-JUN-2004.
XX
PF   28-APR-2000; 2000US-00561861.
XX
PR   29-APR-1999;   99US-00302094.
XX
PA   (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
XX
PI   Tabibzadeh S;
XX
DR   WPI; 2004-429804/40.
DR   N-PSDB; ADO22288.
XX
PT   Inducing growth and/or enhancing survival of embryonic forebrain cells
PT   with an endometrial bleeding associated factor (ebaf) protein, useful for
PT   Parkinson's disease, Alzheimer's disease and amyotrophic lateral
PT   sclerosis.
XX
PS   Claim 1; SEQ ID NO 2; 12pp; English.
XX
CC   The present invention relates to a method of inducing growth and
CC   enhancing survival of nervous tissue such as embryonic forebrain cells.
CC   The method comprises contacting the nervous tissue in vitro with an
CC   endometrial bleeding associated factor (ebaf) protein to induce the
CC   proliferation of the nervous tissue. The method also induces neuronal
CC   growth or enhances neuronal survival. The method is useful for treating
CC   damaged or degenerated nervous tissue in neurodegenerative diseases such
CC   as Parkinson's disease, Alzheimer's disease, Huntington's chorea and
CC   amyotrophic lateral sclerosis. The present sequence represents human
CC   ebaf.
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 8;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 10
ABO84462
ID   ABO84462 standard; protein; 366 AA.
XX
AC   ABO84462;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human cancer-associated protein HP13-026.1.
XX
KW   Human; cancer-associated protein; cytostatic; cancer; leukaemia;
KW   lymphoma; CAP.
XX
OS   Homo sapiens.
XX
PN   WO2004074320-A2.
XX
PD   02-SEP-2004.
XX
PF   17-FEB-2004; 2004WO-US004730.
XX
PR   14-FEB-2003; 2003US-00367094.
PR   14-MAR-2003; 2003US-00388838.
PR   15-APR-2003; 2003US-00417375.
PR   13-JUN-2003; 2003US-00461862.
PR   15-SEP-2003; 2003US-00663431.
PR   15-DEC-2003; 2003US-00737318.
XX
PA   (SAGR-) SAGRES DISCOVERY INC.
XX
PI   Morris DW,  Morris DW,  Malandro MS;
XX
DR   WPI; 2004-652914/63.
DR   N-PSDB; ABD32639.
XX
PT   New isolated cancer-associated polynucleotides and polypeptides useful
PT   for diagnosing, preventing or treating cancers, especially lymphoma and
PT   leukemia, or in screening for agents that modulate cancer.
XX
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PS   claim 18; seqid 167; 310pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising at least 10
CC   contiguous nucleotides of any of the 233 polynucleotide sequences given
CC   in the specification, or its complement. The nucleic acids encode cancer-
CC   associated proteins. Also included are an expression vector comprising
CC   the isolated nucleic acid cited above, a host cell comprising the above
CC   recombinant nucleic acid or expression vector, a microarray for detecting
CC   a cancer-associated (CA) nucleic acid comprising at least one probe
CC   comprising at least 10 contiguous nucleotides of any of the above-
CC   mentioned nucleotide sequences, an isolated polypeptide (encoded within
CC   an open reading frame of a CA sequence selected from any of the 95
CC   polynucleotide sequences as mentioned in the specification, or its
CC   complement), an isolated antibody, (or its antigen binding fragment) that
CC   binds to the above polypeptide, a hybridoma that produces the above
CC   monoclonal antibody, a pharmaceutical composition comprising the above
CC   antibody and a pharmaceutical excipient, a kit for detecting cancer
CC   cells(comprising the antibody cited above, methods for diagnosing cancer
CC   or for detecting the presence or absence of cancer cells in an
CC   individual, a method for inhibiting growth of cancer cells in an
CC   individual, a method for delivering a therapeutic agent to cancer cells
CC   in an individual, an electronic library comprising the above
CC   polynucleotide or polypeptide (or their fragments), methods of screening
CC   for anticancer activity or for a bioactive agent capable of modulating
CC   the activity of a CA protein (CAP), methods for detecting cancer
CC   associated with expression of a polypeptide in a test cell sample, a
CC   method for treating cancers and a method for inhibiting the expression of
CC   CA gene in a cell. The composition and methods are useful for detecting,
CC   diagnosing, preventing and treating cancers, especially lymphoma and
CC   leukaemia. These may also be used in screening for agents that modulate
CC   cancer. The present sequence is a human CAP protein sequence. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 366 AA;

  Query Match             100.0%;  Score 663;  DB 8;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-65;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 11
AAB35940
ID   AAB35940 standard; protein; 294 AA.
XX
AC   AAB35940;
XX
DT   26-FEB-2001  (first entry)
XX
DE   TGF-beta 4 amino acid sequence.
XX
KW   Heparin binding; vascular graft; matrix; cell adhesion; growth factor;
KW   wound healing; dermal wound; wound healing; TGF-beta 4.
XX
OS   Unidentified.
XX
PN   WO200064481-A1.
XX
PD   02-NOV-2000.
XX
PF   22-APR-1999;   99WO-IB000800.
XX
PR   22-APR-1999;   99WO-IB000800.
XX
PA   (ETHZ-) ETH ZURICH & UNIV ZURICH.
XX
PI   Sakiyama SE,  Hubbell JA;
XX
DR   WPI; 2001-024627/03.
XX
PT   Matrix for controlled release of growth factor for wound healing, has
PT   substrate that attaches heparin binding peptide, protein growth factor
PT   that bind heparin with low affinity, and heparin or heparin-like polymer.
XX
PS   Example 5; Page 21; 48pp; English.
XX
CC   This invention relates to a matrix comprising a substrate capable of
CC   providing attachment of a heparin binding peptide (HBP), a peptide
CC   comprising a binding domain which binds heparin with high affinity,
CC   heparin or heparin-like polymer, and a protein growth factor or peptide
CC   fragment which has a domain that binds heparin with low affinity.
CC   Included in the invention is a vascular graft comprising the matrix,
CC   which is capable of supporting cell adhesion. The matrix is used for
CC   delivering low heparin binding affinity growth factor proteins or
CC   peptides in a controlled manner suitable for wound healing. The matrix
CC   can be used in an article for treating dermal wounds, and in an
CC   implantable sterilized composition capable of supporting cell adhesion.
CC   The present sequence represents a growth factor protein. The protein is
CC   used in an example illustrating that non-heparin-binding growth factors
CC   can be released in a controlled manner from heparin-based drug delivery
CC   systems based on their low affinity for heparin
XX
SQ   Sequence 294 AA;

  Query Match             98.9%;  Score 656;  DB 4;  Length 294;
  Best Local Similarity   100.0%;  Pred. No. 6e-65;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        169 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 228

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 119
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        229 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 287


RESULT 12
AAY92013
ID   AAY92013 standard; protein; 370 AA.
XX
AC   AAY92013;
XX
```

```
DT   19-JUL-2000  (first entry)
XX
DE   Human transforming growth factor beta 4/ebaf monomer.
XX
KW   human transforming growth factor beta 4 monomer; ebaf; CKGF; mutant;
KW   cystine knot growth factor; hairpin loop; infertility.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1. .266
FT                   /note= "optionally mutated to increase electrostatic
FT                   interaction between beta hairpin structure and a
FT                   receptor"
FT   Domain          267. .287
FT                   /label= beta_hairpin_loop_1
FT                   /note= "mutant optionally comprises one or more
FT                   substitutions in these residues"
FT   Misc-difference 288. .317
FT                   /note= "optionally mutated to increase electrostatic
FT                   interaction between beta hairpin structure and a
FT                   receptor"
FT   Domain          318. .337
FT                   /label= beta_hairpin_loop_3
FT                   /note= "mutant optionally comprises one or more
FT                   substitutions in these residues"
FT   Misc-difference 338. .370
FT                   /note= "optionally mutated to increase electrostatic
FT                   interaction between beta hairpin structure and a
FT                   receptor"
XX
PN   WO200017360-A1.
XX
PD   30-MAR-2000.
XX
PF   19-MAR-1999;   99WO-US005908.
XX
PR   22-SEP-1998;   98WO-US019772.
XX
PA   (UYMA-) UNIV MARYLAND BALTIMORE.
XX
PI   Weintraub BD,  Szkudlinski MW;
XX
DR   WPI; 2000-283585/24.
XX
PT   New mutant cystine knot growth factor proteins comprising one or more
PT   mutant subunits, useful for treating or preventing diseases e.g.
PT   hypothyroidism and thyroid cancer.
XX
PS   Claim 238; Page 302; 320pp; English.
XX
CC   This is the wild type human transforming growth factor beta 4 monomer.
CC   Mutants comprise at least one electrostatic charge altering mutation in a
CC   beta hairpin loop, resulting in increased bioactivity. Mutant cystine
CC   knot growth factor (CKGF) proteins comprising one or more mutant subunits
CC   and having novel properties or improved pharmacological properties,
CC   compared to wild type CKGFs, are claimed. The CKGF superfamily comprises
CC   at least four families of growth factors: the glycoprotein hormones, the
CC   platelet-derived growth factor (PDGF) family, the neurotrophins and the
CC   transforming growth factor-beta family; the families are known to be
CC   structurally similar (especially comprising the cystine knot topology)
CC   and it was shown that mutations at certain positions in the CKGF hairpin
CC   loops of family members and other members of the CKGF superfamily could
CC   significantly alter the biological activities of the CKGF. Mutant
CC   transforming growth factor family proteins or analogues are useful for
CC   treatment of ovulatory dysfunction, luteal phase defect, unexplained
CC   infertility, time-limited conception and in assisted reproduction
XX
SQ   Sequence 370 AA;

  Query Match             98.9%;  Score 656;  DB 3;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-65;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 304

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 119
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 363


RESULT 13
AAU77104
ID   AAU77104 standard; protein; 370 AA.
XX
AC   AAU77104;
XX
DT   05-JUN-2002  (first entry)
XX
DE   Human transforming growth factor beta 4 (TFG-beta-4) polypeptide.
XX
KW   Human; transforming growth factor beta; TGF-beta; insulin production;
KW   type I diabetes mellitus; pancreatic cell outgrowth; wound healing;
KW   pancreatic duct tissue; ischaemia; stroke; nervous system aging;
KW   neurological condition; neurodegenerative disease; inflammation;
KW   vasal injury; chemical injury; traumatic injury; tumour-induced injury;
KW   amyotrophic lateral sclerosis; spinocerebellar degeneration;
KW   immunological disease; multiple sclerosis; TGF-beta-4.
XX
OS   Homo sapiens.
XX
PN   WO200212336-A2.
XX
PD   14-FEB-2002.
XX
PF   09-FEB-2001; 2001WO-US004192.
XX
PR   09-AUG-2000; 2000US-00635368.
XX
PA   (CURI-) CURIS INC.
XX
PI   Wang M,  Pang K;
XX
DR   WPI; 2002-257468/30.
XX
PT   Treating a subject with a disorder resulting from insufficient insulin
PT   production, and inducing outgrowth of pancreatic cells, involves using a
PT   transforming growth factor beta therapeutic.
XX
PS   Disclosure; Fig 4; 77pp; English.
```

```
XX
CC   The invention relates to treating a subject with a disorder resulting
CC   from insufficient insulin production, involving contacting the subject
CC   with a transforming growth factor beta (TGF-beta) therapeutic. TGF-beta
CC   polypeptides can be used for treating a subject with a disorder resulting
CC   from insufficient insulin production, e.g. type I diabetes mellitus, and
CC   for inducing outgrowth of pancreatic cells associated with pancreatic
CC   duct tissue within a subject. A composition comprising a TGF-beta protein
CC   may be useful in wound healing and treatment of neurological conditions
CC   derived from acute, subacute or chronic injury to the nervous system,
CC   including traumatic injury, chemical injury, vasal injury and deficits
CC   (such as ischaemia resulting from stroke), together with
CC   infectious/inflammatory and tumour-induced injury, aging of the nervous
CC   system including Alzheimer's disease, chronic neurodegenerative diseases
CC   including Parkinson's disease, Huntington's chorea, amyotrophic lateral
CC   sclerosis, spinocerebellar degenerations and chronic immunological
CC   diseases of the nervous system or affecting the nervous system, including
CC   multiple sclerosis. This sequence represents the human TGF-beta-4 protein
XX
SQ   Sequence 370 AA;

  Query Match             98.9%;  Score 656;  DB 5;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 7.9e-65;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        305 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 363


RESULT 14
AAW93159
ID   AAW93159 standard; protein; 120 AA.
XX
AC   AAW93159;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Human Lefty-1 protein fragment.
XX
KW   Lefty-1; human; growth differentiation factor; detection; ovarian; colon;
KW   treatment; cell proliferative disorder; immunological disorder; disease;
KW   muscle; musculodegenerative disorder; tissue repair; burn; contraceptive;
KW   premature labour; fetal growth; cancer; gonadal; adrenal; tumour;
KW   endometrial.
XX
OS   Homo sapiens.
XX
PN   WO9906444-A1.
XX
PD   11-FEB-1999.
XX
PF   24-JUL-1998;   98WO-US015352.
XX
PR   31-JUL-1997;   97US-0054382P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
```

```
XX
PI   Lee S,  Huynh TV,  Sebald S;
XX
DR   WPI; 1999-153704/13.
DR   N-PSDB; AAX22358.
XX
PT   A new growth differentiation factor, Lefty-1 - useful to detect and treat
PT   cell proliferative and immunological disorders.
XX
PS   Example 1; Fig 1; 38pp; English.
XX
CC   This sequence represents a novel human growth differentiation factor,
CC   Lefty-1. The polynucleotides, proteins and antibodies described in the
CC   invention may be used to detect or treat cell proliferative or
CC   immunological disorders, including disease processes involving muscle
CC   such as musculodegenerative disorders or tissue repair following trauma
CC   or burns, in contraceptive regimens, to prevent premature labour, to
CC   enhance fetal growth or development, or to treat various cancers
CC   including gonadal and adrenal tumours, endometrial and ovarian tumours,
CC   and colon cancer
XX
SQ   Sequence 120 AA;

  Query Match             97.9%;  Score 649;  DB 2;  Length 120;
  Best Local Similarity   97.5%;  Pred. No. 1.3e-64;
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AC   AAY17870;
XX
DT   20-AUG-1999  (first entry)
XX
DE   Human bone morphogenic protein BMP-17.
XX
KW   Human; bone morphogenic protein; BMP-17; BMP-18; cartilage; tendon;
KW   connective tissue defect; ligament; meniscus; wound healing; growth;
KW   differentiation; epidermis; muscle; nerve; cardiac muscle.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .142
FT                   /label= pro-peptide
FT   Protein         143. .366
FT                   /label= BMP-17
XX
PN   WO9929718-A2.
XX
PD   17-JUN-1999.
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XX
PF   17-NOV-1998;   98WO-US024613.
XX
PR   10-DEC-1997;   97US-00987904.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Celeste AJ,  Murray BL;
XX
DR   WPI; 1999-385570/32.
DR   N-PSDB; AAX80213.
XX
PT   New Purified bone morphogenic protein-17 and -18 (BMP-17 and BMP-18)
PT   polypeptides, useful for the induction of growth and/or differentiation
PT   of undifferentiated embryonic and stem cells.
XX
PS   Claim 16; Page 35-36; 39pp; English.
XX
CC   The present sequence is a human bone morphogenic protein designated BMP-
CC   17. BMP proteins are useful for the induction of growth and/or
CC   differentiation of undifferentiated embryonic and stem cells, and for the
CC   treatment of bone, cartilage and other connective tissue defects
CC   including tendons, ligaments and meniscus, in wound healing and related
CC   tissue repair, and for treatment of disorders and defects to tissues
CC   which include epidermis, nerve, muscle, including cardiac muscle, and
CC   other tissues and wounds, and organs such as liver, lung, epithelium,
CC   brain, spleen, cardiac, pancreas and kidney tissue. DNA encoding BMP
CC   proteins can be useful as probes to detect expression of BMP proteins,
CC   and the vectors containing DNA encoding BMP proteins are useful for
CC   delivery of the BMP proteins to cells of a patient
XX
SQ   Sequence 366 AA;

  Query Match             97.9%;  Score 649;  DB 2;  Length 366;
  Best Local Similarity   97.5%;  Pred. No. 4.8e-64;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Search completed: September  7, 2006, 00:05:30
Job time : 201 secs
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SCORE Search Results Details for Application 10684209 and Search Result us-10-684-209-2.rai.

Score Home Page Retrieve Application List SCORE System Overview SCORE FAQ Comments / Suggestions

This page gives you Search Results detail for the Application 10684209 and Search Result us-10-684-209-2.rai.

start

Go Back to previous page

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                              GenCore version 5.1.9
                    Copyright (c) 1993 - 2006  Biocceleration Ltd.


OM protein - protein search, using sw model

Run on:         September  7, 2006, 00:10:48 ; Search time 50 Seconds
                                           (without alignments)
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Title:          US-10-684-209-2
Perfect score:  663
Sequence:       1 AQGDCDPEAPMTEGTRCCRQ..........RVQKCSCASDGALVPRRLQP 120

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                Gapop 10.0 , Gapext 0.5

Searched:       650591 seqs, 87530628 residues

Total number of hits satisfying chosen parameters:      650591

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

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                3:  /EMC_Celerra_SIDS3/ptodata/2/iaa/7_COMB.pep:*
                4:  /EMC_Celerra_SIDS3/ptodata/2/iaa/H_COMB.pep:*
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      Pred. No. is the number of results predicted by chance to have a
      score greater than or equal to the score of the result being printed,
      and is derived by analysis of the total score distribution.

                                    SUMMARIES
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Result          Query
  No.   Score   Match  Length  DB  ID                          Description
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    1     663   100.0     120   2  US-09-463-932A-2             Sequence 2, Appli
    2     663   100.0     366   2  US-08-987-904A-4             Sequence 4, Appli
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     3     663  100.0    366  2  US-09-438-623A-4           Sequence 4, Appli
     4     663  100.0    366  2  US-09-679-971-2            Sequence 2, Appli
     5     663  100.0    366  2  US-09-561-861-2            Sequence 2, Appli
     6     656   98.9    294  2  US-09-848-664A-15          Sequence 15, Appl
     7     649   97.9    120  2  US-09-485-053-2            Sequence 2, Appli
     8     649   97.9    366  2  US-08-987-904A-2           Sequence 2, Appli
     9     649   97.9    366  2  US-09-438-623A-2           Sequence 2, Appli
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    12     643   97.0    366  2  US-09-902-775A-114         Sequence 114, App
    13     643   97.0    366  2  US-09-906-700-114          Sequence 114, App
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    17     643   97.0    366  2  US-09-905-381A-114         Sequence 114, App
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    26     643   97.0    366  3  US-09-907-841-114          Sequence 114, App
    27     643   97.0    377  2  US-09-949-016-8509         Sequence 8509, Ap
    28   133.5   20.1    119  1  US-08-274-215A-12          Sequence 12, Appl
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    30   133.5   20.1    119  2  US-09-184-933-12           Sequence 12, Appl
    31   133.5   20.1    119  5  PCT-US95-08745-12          Sequence 12, Appl
    32   133.5   20.1    350  1  US-08-765-662-14           Sequence 14, Appl
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    41     122   18.4    120  1  US-08-481-377-22           Sequence 22, Appl
    42     122   18.4    120  1  US-08-491-835-20           Sequence 20, Appl
    43     122   18.4    120  2  US-09-153-733A-22          Sequence 22, Appl
    44     122   18.4    120  2  US-08-946-092A-20          Sequence 20, Appl
    45     122   18.4    120  2  US-09-172-062-20           Sequence 20, Appl


                                        ALIGNMENTS


RESULT 1
US-09-463-932A-2
; Sequence 2, Application US/09463932A
; Patent No. 6635480
; GENERAL INFORMATION:
;  APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
;  APPLICANT:  LEE, Se-Lin
;  APPLICANT:  SEBALD, Suzanne
;  APPLICANT:  HUYNH, Thanh
;  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR, Lefty-2
;  FILE REFERENCE: JHU1430-1
;  CURRENT APPLICATION NUMBER: US/09/463,932A
;  CURRENT FILING DATE:  2000-04-14
;  PRIOR APPLICATION NUMBER: PCT/ US98/15174
;  PRIOR FILING DATE: 1998-07-24
;  PRIOR APPLICATION NUMBER: US 60/054,381
;  PRIOR FILING DATE: 1997-07-31
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 120
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-463-932A-2

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RESULT 2
US-08-987-904A-4
; Sequence 4, Application US/08987904A
; Patent No. 6027917
;  GENERAL INFORMATION:
;    APPLICANT:  Celeste, Anthony J.
;    APPLICANT:  Murray, Beth
;    TITLE OF INVENTION:  BONE MORPHOGENETIC PROTEIN (BMP)- 17 AND BMP-18
;    TITLE OF INVENTION:  COMPOSITIONS
;    NUMBER OF SEQUENCES:  7
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genetics Institute, Inc.
;      STREET:  87 CambridgePark Drive
;      CITY:  Cambridge
;      STATE:  MA
;      COUNTRY:  US
;      ZIP:  02140
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/987,904A
;      FILING DATE:  10-DEC-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  LAZAR, STEVEN R
;      REGISTRATION NUMBER:  32,618
;      REFERENCE/DOCKET NUMBER:  GI 5307
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 498-8769
;      TELEFAX:  (617) 876-8581
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  366 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-987-904A-4

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RESULT 3
US-09-438-623A-4
; Sequence 4, Application US/09438623A
; Patent No. 6492493
;   GENERAL INFORMATION:
;        APPLICANT: Celeste, Anthony J.
;                   Murray, Beth
;        TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP)- 17
;                            AND BMP-18 COMPOSITIONS
;        NUMBER OF SEQUENCES: 7
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Genetics Institute, Inc.
;             STREET: 87 CambridgePark Drive
;             CITY: Cambridge
;             STATE: MA
;             COUNTRY: US
;             ZIP: 02140
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/438,623A
;             FILING DATE: 12-No. 6492493-1999
;             CLASSIFICATION:
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/987,904
;             FILING DATE: 10-DEC-1997
;        ATTORNEY/AGENT INFORMATION:
;             NAME: LAZAR, STEVEN R
;             REGISTRATION NUMBER: 32,618
;             REFERENCE/DOCKET NUMBER: GI 5307
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (617) 498-8769
;             TELEFAX: (617) 876-8581
;   INFORMATION FOR SEQ ID NO: 4:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 366 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        SEQUENCE DESCRIPTION: SEQ ID NO: 4:
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US-09-438-623A-4

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RESULT 4
US-09-679-971-2
; Sequence 2, Application US/09679971
; Patent No. 6649588
; GENERAL INFORMATION:
;  APPLICANT: Tabibzadeh, Siamak
;  APPLICANT:  Mason, James
;  TITLE OF INVENTION: INHIBITION OF TGF-BETA AND USES THEREOF
;  FILE REFERENCE: 50425/66
;  CURRENT APPLICATION NUMBER: US/09/679,971
;  CURRENT FILING DATE:  2000-10-05
;  NUMBER OF SEQ ID NOS: 4
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-679-971-2

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RESULT 5
US-09-561-861-2
; Sequence 2, Application US/09561861
; Patent No. 6747004
; GENERAL INFORMATION:
;  APPLICANT: Tabibzadeh, Siamak
;  TITLE OF INVENTION: METHOD FOR INDUCING GROWTH AND ENHANCING SURVIVAL OF NERVOUS TISSUE
;  FILE REFERENCE: 50425/70
;  CURRENT APPLICATION NUMBER: US/09/561,861
;  CURRENT FILING DATE:  2000-04-28
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 366
;    TYPE: PRT
;    ORGANISM: homo sapiens
US-09-561-861-2

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RESULT 6
US-09-848-664A-15
; Sequence 15, Application US/09848664A
; Patent No. 6723344
; GENERAL INFORMATION:
;  APPLICANT: Sakiyama-Elbert, Shelly E.
;  APPLICANT:  Hubbell, Jeffrey A.
;  TITLE OF INVENTION: Controlled Release of No. 6723344-Heparin Binding Growth
;  TITLE OF INVENTION:  Factors from Heparin Containing Matrices
;  FILE REFERENCE: ETH 108
;  CURRENT APPLICATION NUMBER: US/09/848,664A
;  CURRENT FILING DATE:  2001-05-03
;  PRIOR APPLICATION NUMBER: US/09/298,084A
;  PRIOR FILING DATE: 1999-04-22
;  NUMBER OF SEQ ID NOS: 31
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
;    LENGTH: 294
;    TYPE: PRT
;    ORGANISM: Homo sapiens
US-09-848-664A-15

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RESULT 7
US-09-485-053-2
; Sequence 2, Application US/09485053
; Patent No. 6428966
; GENERAL INFORMATION:
;  APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
;  APPLICANT:  LEE, Se-Lin
;  APPLICANT:  SEBALD, Suzanne
;  APPLICANT:  HUYNH, Thanh
;  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR, Lefty-1
;  FILE REFERENCE: JHU1450-1
;  CURRENT APPLICATION NUMBER: US/09/485,053
;  CURRENT FILING DATE:  2000-01-31
;  PRIOR APPLICATION NUMBER: PCT/ US98/15352
;  PRIOR FILING DATE: 1998-07-24
;  PRIOR APPLICATION NUMBER: US 60/054,382
;  PRIOR FILING DATE: 1997-07-31
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 120
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-485-053-2

  Query Match             97.9%;  Score 649;  DB 2;  Length 120;
  Best Local Similarity   97.5%;  Pred. No. 3.4e-67;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

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RESULT 8
US-08-987-904A-2
; Sequence 2, Application US/08987904A
; Patent No. 6027917
;  GENERAL INFORMATION:
;    APPLICANT:  Celeste, Anthony J.
;    APPLICANT:  Murray, Beth
;    TITLE OF INVENTION:  BONE MORPHOGENETIC PROTEIN (BMP)- 17 AND BMP-18
;    TITLE OF INVENTION:  COMPOSITIONS
;    NUMBER OF SEQUENCES:  7
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genetics Institute, Inc.
;      STREET:  87 CambridgePark Drive
;      CITY:  Cambridge
;      STATE:  MA
;      COUNTRY:  US
;      ZIP:  02140
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/987,904A
;      FILING DATE:  10-DEC-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  LAZAR, STEVEN R
;      REGISTRATION NUMBER:  32,618
;      REFERENCE/DOCKET NUMBER:  GI 5307
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 498-8769
;       TELEFAX:  (617) 876-8581
;   INFORMATION FOR SEQ ID NO:  2:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  366 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-08-987-904A-2

  Query Match             97.9%;  Score 649;  DB 2;  Length 366;
  Best Local Similarity   97.5%;  Pred. No. 1.4e-66;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 9
US-09-438-623A-2
; Sequence 2, Application US/09438623A
; Patent No. 6492493
;   GENERAL INFORMATION:
;        APPLICANT: Celeste, Anthony J.
;                   Murray, Beth
;        TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP)- 17
;                            AND BMP-18 COMPOSITIONS
;        NUMBER OF SEQUENCES: 7
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Genetics Institute, Inc.
;             STREET: 87 CambridgePark Drive
;             CITY: Cambridge
;             STATE: MA
;             COUNTRY: US
;             ZIP: 02140
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/438,623A
;             FILING DATE: 12-No. 6492493-1999
;             CLASSIFICATION:
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/987,904
;             FILING DATE: 10-DEC-1997
;        ATTORNEY/AGENT INFORMATION:
;             NAME: LAZAR, STEVEN R
;             REGISTRATION NUMBER: 32,618
;             REFERENCE/DOCKET NUMBER: GI 5307
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (617) 498-8769
;             TELEFAX: (617) 876-8581
;   INFORMATION FOR SEQ ID NO: 2:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 366 amino acids
;              TYPE: amino acid
;              TOPOLOGY: linear
;         MOLECULE TYPE: protein
;         SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-438-623A-2

  Query Match             97.9%;  Score 649;  DB 2;  Length 366;
  Best Local Similarity   97.5%;  Pred. No. 1.4e-66;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 10
US-09-907-794A-114
; Sequence 114, Application US/09907794A
; Patent No. 6635468
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/907,794A
;  CURRENT FILING DATE:  2001-07-17
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 114
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-907-794A-114

  Query Match             97.0%;  Score 643;  DB 2;  Length 366;
  Best Local Similarity   96.7%;  Pred. No. 6.8e-66;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 11
US-09-905-125A-114
; Sequence 114, Application US/09905125A
; Patent No. 6664376
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James.
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/905,125A
;  CURRENT FILING DATE:  2001-07-12
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 114
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-905-125A-114
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  Query Match             97.0%;  Score 643;  DB 2;  Length 366;
  Best Local Similarity   96.7%;  Pred. No. 6.8e-66;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 12
US-09-902-775A-114
; Sequence 114, Application US/09902775A
; Patent No. 6686451
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/902,775A
;  CURRENT FILING DATE:  2001-07-10
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 114
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-902-775A-114

  Query Match             97.0%;  Score 643;  DB 2;  Length 366;
  Best Local Similarity   96.7%;  Pred. No. 6.8e-66;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 13
US-09-906-700-114
; Sequence 114, Application US/09906700
; Patent No. 6723535
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/906,700
;  CURRENT FILING DATE:  2000-09-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 114
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-906-700-114

  Query Match             97.0%;  Score 643;  DB 2;  Length 366;
  Best Local Similarity   96.7%;  Pred. No. 6.8e-66;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;
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Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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RESULT 14
US-09-903-603A-114
; Sequence 114, Application US/09903603A
; Patent No. 6767995
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: GNE.1618P2C12
;  CURRENT APPLICATION NUMBER: US/09/903,603A
;  CURRENT FILING DATE:  2001-07-11
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 114
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-903-603A-114

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  Best Local Similarity   96.7%;  Pred. No. 6.8e-66;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

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RESULT 15
US-09-904-920A-114
; Sequence 114, Application US/09904920A
; Patent No. 6806352
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/904,920A
;  CURRENT FILING DATE:  2001-07-13
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 114
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-904-920A-114

  Query Match             97.0%;  Score 643;  DB 2;  Length 366;
  Best Local Similarity   96.7%;  Pred. No. 6.8e-66;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

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Job time : 51 secs
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SCORE 1.3 BuildDate: 12/06/2005

SCORE Search Results Details for Application 10684209 and Search Result us-10-684-209-2.rapbm.

Score Home Page Retrieve Application List SCORE System Overview SCORE FAQ Comments / Suggestions

This page gives you Search Results detail for the Application 10684209 and Search Result us-10-684-209-2.rapbm.

start

Go Back to previous page

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             Copyright (c) 1993 - 2006  Biocceleration Ltd.


OM protein - protein search, using sw model

Run on:         September  7, 2006, 00:11:28 ; Search time 182 Seconds
                                           (without alignments)
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Title:          US-10-684-209-2
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Scoring table:  BLOSUM62
                Gapop 10.0 , Gapext 0.5

Searched:       2097797 seqs, 463214858 residues

Total number of hits satisfying chosen parameters:      2097797

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
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      Pred. No. is the number of results predicted by chance to have a
      score greater than or equal to the score of the result being printed,
      and is derived by analysis of the total score distribution.

                                        SUMMARIES
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Result              Query
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     2      663     100.0    366  3  US-09-438-623A-4            Sequence 4, Appli
     3      663     100.0    366  4  US-10-228-808-4             Sequence 4, Appli
   4      656    98.9     294  3  US-09-848-664-15            Sequence 15, Appl
   5      656    98.9     371  3  US-09-813-398-16            Sequence 16, Appl
   6      656    98.9     371  5  US-10-826-324-16            Sequence 16, Appl
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  23      643    97.0     366  3  US-09-907-841-114           Sequence 114, App
  24      643    97.0     366  3  US-09-904-011-114           Sequence 114, App
  25      643    97.0     366  3  US-09-903-640-114           Sequence 114, App
  26      643    97.0     366  3  US-09-908-093-114           Sequence 114, App
  27      643    97.0     366  3  US-09-906-742-114           Sequence 114, App
  28      643    97.0     366  3  US-09-906-838-114           Sequence 114, App
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  30      643    97.0     366  3  US-09-907-942-114           Sequence 114, App
  31      643    97.0     366  3  US-09-904-859-114           Sequence 114, App
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  33      643    97.0     366  3  US-09-904-820-114           Sequence 114, App
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  38      643    97.0     366  3  US-09-902-903-114           Sequence 114, App
  39      643    97.0     366  3  US-09-903-749A-114          Sequence 114, App
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  44      643    97.0     366  3  US-09-903-943-114           Sequence 114, App
  45      643    97.0     366  3  US-09-904-462-114           Sequence 114, App


                                  ALIGNMENTS


RESULT 1
US-10-684-209-2
; Sequence 2, Application US/10684209
; Publication No. US20040146891A1
; GENERAL INFORMATION:
;  APPLICANT: THE JOHNS HOPKINS UNIVERSITY
;  APPLICANT:  LEE, Se-Jin
;  APPLICANT:  HUYNH, Thanh
;  APPLICANT:  SEBALD, Suzanne
;  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR, Lefty-2
;  FILE REFERENCE: JHU1430-2
;  CURRENT APPLICATION NUMBER: US/10/684,209
;  CURRENT FILING DATE:  2003-10-10
;  PRIOR APPLICATION NUMBER: US 09/463,932
;  PRIOR FILING DATE: 2000-04-14
;  PRIOR APPLICATION NUMBER: PCT/ US98/15174
;  PRIOR FILING DATE: 1998-07-24
;  PRIOR APPLICATION NUMBER: US 60/054,381
;  PRIOR FILING DATE: 1997-07-31
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 120
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-684-209-2

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RESULT 2
US-09-438-623A-4
; Sequence 4, Application US/09438623A
; Patent No. US20020143159A1
;   GENERAL INFORMATION:
;        APPLICANT: Celeste, Anthony J.
;                   Murray, Beth
;        TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP)- 17
;                            AND BMP-18 COMPOSITIONS
;        NUMBER OF SEQUENCES: 7
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Genetics Institute, Inc.
;             STREET: 87 CambridgePark Drive
;             CITY: Cambridge
;             STATE: MA
;             COUNTRY: US
;             ZIP: 02140
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/438,623A
;             FILING DATE: 12-No. US20020143159A1-1999
;             CLASSIFICATION:
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/987,904
;             FILING DATE: 10-DEC-1997
;        ATTORNEY/AGENT INFORMATION:
;             NAME: LAZAR, STEVEN R
;             REGISTRATION NUMBER: 32,618
;             REFERENCE/DOCKET NUMBER: GI 5307
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (617) 498-8769
;              TELEFAX: (617) 876-8581
;   INFORMATION FOR SEQ ID NO: 4:
;        SEQUENCE CHARACTERISTICS:
;              LENGTH: 366 amino acids
;              TYPE: amino acid
;              TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-438-623A-4

  Query Match             100.0%;  Score 663;  DB 3;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 4e-62;
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Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 3
US-10-228-808-4
; Sequence 4, Application US/10228808
; Publication No. US20030149241A1
;   GENERAL INFORMATION:
;        APPLICANT: Celeste, Anthony J.
;                   Murray, Beth
;        TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP)- 17
;                            AND BMP-18 COMPOSITIONS
;        NUMBER OF SEQUENCES: 7
;        CORRESPONDENCE ADDRESS:
;              ADDRESSEE: Genetics Institute, Inc.
;              STREET: 87 CambridgePark Drive
;              CITY: Cambridge
;              STATE: MA
;              COUNTRY: US
;              ZIP: 02140
;        COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: IBM PC compatible
;              OPERATING SYSTEM: PC-DOS/MS-DOS
;              SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/10/228,808
;              FILING DATE: 26-Aug-2002
;              CLASSIFICATION:
;        PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: US/09/438,623A
;              FILING DATE: 12-No. US20030149241A1-1999
;              APPLICATION NUMBER: 08/987,904
;              FILING DATE: 10-DEC-1997
;        ATTORNEY/AGENT INFORMATION:
;              NAME: LAZAR, STEVEN R
;              REGISTRATION NUMBER: 32,618
;              REFERENCE/DOCKET NUMBER: GI 5307
;        TELECOMMUNICATION INFORMATION:
;              TELEPHONE: (617) 498-8769
;              TELEFAX: (617) 876-8581
;   INFORMATION FOR SEQ ID NO: 4:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 366 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
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US-10-228-808-4

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RESULT 4
US-09-848-664-15
; Sequence 15, Application US/09848664
; Patent No. US20020146414A1
; GENERAL INFORMATION:
;  APPLICANT: Sakiyama-Elbert, Shelly E.
;  APPLICANT:  Hubbell, Jeffrey A.
;  TITLE OF INVENTION: Controlled Release of No. US20020146414A1-Heparin Binding Growth
;  TITLE OF INVENTION:  Factors from Heparin Containing Matrices
;  FILE REFERENCE: ETH 108
;  CURRENT APPLICATION NUMBER: US/09/848,664
;  CURRENT FILING DATE:  2001-05-03
;  PRIOR APPLICATION NUMBER: 09/298,084
;  PRIOR FILING DATE: 1999-04-22
;  NUMBER OF SEQ ID NOS: 31
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
;   LENGTH: 294
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-848-664-15

  Query Match             98.9%;  Score 656;  DB 3;  Length 294;
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RESULT 5
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; Sequence 16, Application US/09813398
; Patent No. US20020169292A1
; GENERAL INFORMATION:
;  APPLICANT: Bruce D. Weintraub
;  APPLICANT:  Mariusz W. Szkudlinski
;  APPLICANT:  University of Maryland
;  TITLE OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
;  FILE REFERENCE: UOFMD.003C1
;  CURRENT APPLICATION NUMBER: US/09/813,398
;  CURRENT FILING DATE:  2001-03-20
;  PRIOR APPLICATION NUMBER: PCT/US99/05908
;  PRIOR FILING DATE: 1999-03-19
;  PRIOR APPLICATION NUMBER: PCT/US98/19772
;  PRIOR FILING DATE: 1998-09-22
;  NUMBER OF SEQ ID NOS: 41
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
;   LENGTH: 371
;   TYPE: PRT
;   ORGANISM: HOMO SAPIEN
US-09-813-398-16

  Query Match             98.9%;  Score 656;  DB 3;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-61;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        246 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 305

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 119
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        306 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 364


RESULT 6
US-10-826-324-16
; Sequence 16, Application US/10826324
; Publication No. US20040265972A1
; GENERAL INFORMATION:
;  APPLICANT: Bruce D. Weintraub
;  APPLICANT:  Mariusz W. Szkudlinski
;  APPLICANT:  University of Maryland
;  TITLE OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
;  FILE REFERENCE: UOFMD.003C1
;  CURRENT APPLICATION NUMBER: US/10/826,324
;  CURRENT FILING DATE:  2004-04-19
;  PRIOR APPLICATION NUMBER: US/09/813,398
;  PRIOR FILING DATE: 2001-03-20
;  PRIOR APPLICATION NUMBER: PCT/US99/05908
;  PRIOR FILING DATE: 1999-03-19
;  PRIOR APPLICATION NUMBER: PCT/US98/19772
;  PRIOR FILING DATE: 1998-09-22
;  NUMBER OF SEQ ID NOS: 41
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
;   LENGTH: 371
;   TYPE: PRT
;   ORGANISM: HOMO SAPIEN
US-10-826-324-16

  Query Match             98.9%;  Score 656;  DB 5;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-61;
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Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 119
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Db        306 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQ 364


RESULT 7
US-10-210-166-2
; Sequence 2, Application US/10210166
; Publication No. US20030022841A1
; GENERAL INFORMATION:
;  APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
;  APPLICANT:  LEE, Se-Lin
;  APPLICANT:  SEBALD, Suzanne
;  APPLICANT:  HUYNH, Thanh
;  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR, Lefty-1
;  FILE REFERENCE: JHU1450-1
;  CURRENT APPLICATION NUMBER: US/10/210,166
;  CURRENT FILING DATE:  2002-07-31
;  PRIOR APPLICATION NUMBER: US/09/485,053
;  PRIOR FILING DATE: 2000-01-31
;  PRIOR APPLICATION NUMBER: PCT/ US98/15352
;  PRIOR FILING DATE: 1998-07-24
;  PRIOR APPLICATION NUMBER: US 60/054,382
;  PRIOR FILING DATE: 1997-07-31
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 120
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-210-166-2

  Query Match             97.9%;  Score 649;  DB 4;  Length 120;
  Best Local Similarity   97.5%;  Pred. No. 3.6e-61;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db         61 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120


RESULT 8
US-09-438-623A-2
; Sequence 2, Application US/09438623A
; Patent No. US20020143159A1
;   GENERAL INFORMATION:
;        APPLICANT: Celeste, Anthony J.
;                   Murray, Beth
;        TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP)- 17
;                            AND BMP-18 COMPOSITIONS
;        NUMBER OF SEQUENCES: 7
;         CORRESPONDENCE ADDRESS:
;              ADDRESSEE: Genetics Institute, Inc.
;              STREET: 87 CambridgePark Drive
;              CITY: Cambridge
;              STATE: MA
;              COUNTRY: US
;              ZIP: 02140
;         COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: IBM PC compatible
;              OPERATING SYSTEM: PC-DOS/MS-DOS
;              SOFTWARE: PatentIn Release #1.0, Version #1.30
;         CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/09/438,623A
;              FILING DATE: 12-No. US20020143159A1-1999
;              CLASSIFICATION:
;         PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: 08/987,904
;              FILING DATE: 10-DEC-1997
;         ATTORNEY/AGENT INFORMATION:
;              NAME: LAZAR, STEVEN R
;              REGISTRATION NUMBER: 32,618
;              REFERENCE/DOCKET NUMBER: GI 5307
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: (617) 498-8769
;              TELEFAX: (617) 876-8581
;    INFORMATION FOR SEQ ID NO: 2:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 366 amino acids
;              TYPE: amino acid
;              TOPOLOGY: linear
;         MOLECULE TYPE: protein
;         SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-438-623A-2

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  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

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Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 9
US-10-228-808-2
; Sequence 2, Application US/10228808
; Publication No. US20030149241A1
;    GENERAL INFORMATION:
;         APPLICANT: Celeste, Anthony J.
;                    Murray, Beth
;         TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP)- 17
;                             AND BMP-18 COMPOSITIONS
;         NUMBER OF SEQUENCES: 7
;         CORRESPONDENCE ADDRESS:
;              ADDRESSEE: Genetics Institute, Inc.
;              STREET: 87 CambridgePark Drive
;              CITY: Cambridge
;              STATE: MA
;              COUNTRY: US
;              ZIP: 02140
;         COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: IBM PC compatible
;              OPERATING SYSTEM: PC-DOS/MS-DOS
;              SOFTWARE: PatentIn Release #1.0, Version #1.30
;         CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/10/228,808
;              FILING DATE: 26-Aug-2002
;              CLASSIFICATION:
;         PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: US/09/438,623A
;              FILING DATE: 12-No. US20030149241A1-1999
;              APPLICATION NUMBER: 08/987,904
;              FILING DATE: 10-DEC-1997
;         ATTORNEY/AGENT INFORMATION:
;              NAME: LAZAR, STEVEN R
;              REGISTRATION NUMBER: 32,618
;              REFERENCE/DOCKET NUMBER: GI 5307
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: (617) 498-8769
;              TELEFAX: (617) 876-8581
;    INFORMATION FOR SEQ ID NO: 2:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 366 amino acids
;              TYPE: amino acid
;              TOPOLOGY: linear
;         MOLECULE TYPE: protein
;         SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-228-808-2

  Query Match             97.9%;  Score 649;  DB 4;  Length 366;
  Best Local Similarity   97.5%;  Pred. No. 1.3e-60;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

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Db        307 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 10
US-10-921-793-48
; Sequence 48, Application US/10921793
; Publication No. US20060039949A1
; GENERAL INFORMATION:
;  APPLICANT: Nycz, Jeffrey
;  TITLE OF INVENTION: Orthopaedic Device with Porous Substrate and Impregnated
;  TITLE OF INVENTION:  Osteoinductive Material
;  FILE REFERENCE: 64118.000087
;  CURRENT APPLICATION NUMBER: US/10/921,793
;  CURRENT FILING DATE:  2004-08-20
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 48
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-921-793-48

  Query Match             97.9%;  Score 649;  DB 5;  Length 366;
  Best Local Similarity   97.5%;  Pred. No. 1.3e-60;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Db        307 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 11
US-10-931-198-48
; Sequence 48, Application US/10931198
; Publication No. US20060045902A1
; GENERAL INFORMATION:
;  APPLICANT: Nycz, Jeffrey
;  TITLE OF INVENTION: Orthopaedic Device with Porous Substrate and Impregnated
;  TITLE OF INVENTION:  Osteoinductive Material
;  FILE REFERENCE: 64118.000087
;  CURRENT APPLICATION NUMBER: US/10/931,198
;  CURRENT FILING DATE:  2004-09-01
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 48
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-931-198-48

  Query Match             97.9%;  Score 649;  DB 5;  Length 366;
  Best Local Similarity   97.5%;  Pred. No. 1.3e-60;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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RESULT 12
US-10-942-042-48
; Sequence 48, Application US/10942042
; Publication No. US20060057184A1
; GENERAL INFORMATION:
;  APPLICANT: Nycz, Jeffrey
;  TITLE OF INVENTION: Orthopaedic Device with Porous Substrate and Impregnated
;  TITLE OF INVENTION:  Osteoinductive Material
;  FILE REFERENCE: 64118.000087
;  CURRENT APPLICATION NUMBER: US/10/942,042
;  CURRENT FILING DATE:  2004-09-16
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 48
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-942-042-48

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  Best Local Similarity   97.5%;  Pred. No. 1.3e-60;
  Matches  117;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
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Db        307 KWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 13
US-10-921-793-50
; Sequence 50, Application US/10921793
; Publication No. US20060039949A1
; GENERAL INFORMATION:
;  APPLICANT: Nycz, Jeffrey
;  TITLE OF INVENTION: Orthopaedic Device with Porous Substrate and Impregnated
;  TITLE OF INVENTION:  Osteoinductive Material
;  FILE REFERENCE: 64118.000087
;  CURRENT APPLICATION NUMBER: US/10/921,793
;  CURRENT FILING DATE:  2004-08-20
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 50
;   LENGTH: 365
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-921-793-50

  Query Match             97.7%;  Score 647.5;  DB 5;  Length 365;
  Best Local Similarity   99.2%;  Pred. No. 1.8e-60;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
                |||||||||||||||||||||||||||||| |||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGR-RPQVVSLPNMRVQKCSCASDGALVPRRLQP 365


RESULT 14
US-10-931-198-50
; Sequence 50, Application US/10931198
; Publication No. US20060045902A1
; GENERAL INFORMATION:
;  APPLICANT: Nycz, Jeffrey
;  TITLE OF INVENTION: Orthopaedic Device with Porous Substrate and Impregnated
;  TITLE OF INVENTION:  Osteoinductive Material
;  FILE REFERENCE: 64118.000087
;  CURRENT APPLICATION NUMBER: US/10/931,198
;  CURRENT FILING DATE:  2004-09-01
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 50
;   LENGTH: 365
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-931-198-50

  Query Match             97.7%;  Score 647.5;  DB 5;  Length 365;
  Best Local Similarity   99.2%;  Pred. No. 1.8e-60;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

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              ||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
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RESULT 15
US-10-942-042-50
; Sequence 50, Application US/10942042
; Publication No. US20060057184A1
; GENERAL INFORMATION:
;  APPLICANT: Nycz, Jeffrey
;  TITLE OF INVENTION: Orthopaedic Device with Porous Substrate and Impregnated
;  TITLE OF INVENTION:  Osteoinductive Material
;  FILE REFERENCE: 64118.000087
;  CURRENT APPLICATION NUMBER: US/10/942,042
;  CURRENT FILING DATE:  2004-09-16
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 50
;   LENGTH: 365
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-942-042-50

  Query Match             97.7%;  Score 647.5;  DB 5;  Length 365;
  Best Local Similarity   99.2%;  Pred. No. 1.8e-60;
  Matches  119;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
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Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGR-RPQVVSLPNMRVQKCSCASDGALVPRRLQP 365


Search completed: September  7, 2006, 00:15:19
Job time : 183 secs
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SCORE Search Results Details for Application 10684209 and Search Result us-10-684-209-2.rapbn.

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                        GenCore version 5.1.9
                 Copyright (c) 1993 - 2006  Biocceleration Ltd.


OM protein - protein search, using sw model

Run on:         September  7, 2006, 00:12:28 ; Search time 33 Seconds
                                           (without alignments)
                                           255.454 Million cell updates/sec

Title:          US-10-684-209-2
Perfect score:  663
Sequence:       1 AQGDCDPEAPMTEGTRCCRQ..........RVQKCSCASDGALVPRRLQP 120

Scoring table:  BLOSUM62
                Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters:      254368

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :       Published_Applications_AA_New:*
                1:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
                2:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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                7:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_NEW_PUB.pep:*
                8:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US60_NEW_PUB.pep:*

     Pred. No. is the number of results predicted by chance to have a
     score greater than or equal to the score of the result being printed,
     and is derived by analysis of the total score distribution.

                                SUMMARIES
                %
Result          Query
  No.   Score   Match Length DB  ID                          Description
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    1     663   100.0    366  6  US-10-014-320-2              Sequence 2, Appli
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     2      643    97.0     366  6  US-10-833-833-6            Sequence 6, Appli
     3      559    84.3     380  6  US-10-833-833-3            Sequence 3, Appli
     4      505    76.2     376  7  US-11-030-653-2            Sequence 2, Appli
     5      122    18.4     120  7  US-11-356-823-22           Sequence 22, Appl
     6      122    18.4     407  6  US-10-505-928-109          Sequence 109, App
     7    114.5    17.3     116  7  US-11-356-823-26           Sequence 26, Appl
     8      113    17.0     114  7  US-11-356-823-25           Sequence 25, Appl
     9      113    17.0     412  6  US-10-553-520-140          Sequence 140, App
    10      111    16.7     114  7  US-11-356-823-23           Sequence 23, Appl
    11      111    16.7     118  7  US-11-356-823-14           Sequence 14, Appl
    12      111    16.7    1171  7  US-11-048-197-8            Sequence 8, Appli
    13    109.5    16.5     119  7  US-11-356-823-18           Sequence 18, Appl
    14      105    15.8     114  7  US-11-356-823-24           Sequence 24, Appl
    15      105    15.8     414  6  US-10-833-833-14           Sequence 14, Appl
    16      105    15.8     442  6  US-10-833-833-12           Sequence 12, Appl
    17      104    15.7     114  7  US-11-356-823-27           Sequence 27, Appl
    18      104    15.7     425  6  US-10-833-833-9            Sequence 9, Appli
    19      103    15.5     118  7  US-11-356-823-10           Sequence 10, Appl
    20      101    15.2     126  7  US-11-401-228-2            Sequence 2, Appli
    21      101    15.2     362  7  US-11-401-228-11           Sequence 11, Appl
    22      100    15.1     375  7  US-11-314-397-1            Sequence 1, Appli
    23       99    14.9     109  7  US-11-247-691-2            Sequence 2, Appli
    24       98    14.8     121  7  US-11-356-823-20           Sequence 20, Appl
    25       98    14.8     366  7  US-11-300-928-5            Sequence 5, Appli
    26     97.5    14.7     121  7  US-11-356-823-21           Sequence 21, Appl
    27     97.5    14.7     426  7  US-11-300-928-16           Sequence 16, Appl
    28     97.5    14.7     426  7  US-11-300-928-67           Sequence 67, Appl
    29       96    14.5     118  7  US-11-356-823-12           Sequence 12, Appl
    30       96    14.5     431  6  US-10-496-399-2            Sequence 2, Appli
    31       96    14.5     431  6  US-10-539-868-10           Sequence 10, Appl
    32       96    14.5     431  7  US-11-332-656-1            Sequence 1, Appli
    33       96    14.5     431  7  US-11-347-699-2            Sequence 2, Appli
    34       96    14.5     431  7  US-11-286-364A-1           Sequence 1, Appli
    35       96    14.5     431  7  US-11-286-364A-11          Sequence 11, Appl
    36     94.5    14.3     117  7  US-11-356-823-15           Sequence 15, Appl
    37     94.5    14.3     117  7  US-11-356-823-16           Sequence 16, Appl
    38     94.5    14.3     396  6  US-10-496-399-1            Sequence 1, Appli
    39     94.5    14.3     408  6  US-10-505-928-455          Sequence 455, App
    40     94.5    14.3    1169  7  US-11-048-197-6            Sequence 6, Appli
    41       94    14.2     118  7  US-11-356-823-11           Sequence 11, Appl
    42       94    14.2     118  7  US-11-356-823-13           Sequence 13, Appl
    43       93    14.0     513  6  US-10-505-928-765          Sequence 765, App
    44     89.5    13.5     117  7  US-11-356-823-7            Sequence 7, Appli
    45     89.5    13.5     366  7  US-11-356-823-6            Sequence 6, Appli


                                       ALIGNMENTS


RESULT 1
US-10-014-320-2
; Sequence 2, Application US/10014320
; Publication No. US20060099576A1
; GENERAL INFORMATION:
;  APPLICANT: North Shore - Long Island Jewish Research Institute
;  APPLICANT:  Tabibzadeh, Siamak
;  TITLE OF INVENTION: METHOD FOR DIAGNOSING A PRE-NEOPLASTIC OR NEOPLASTIC LESION IN
;  TITLE OF INVENTION:  TRANSITIONAL EPITHELIAL CELLS
;  FILE REFERENCE: 50425/137
;  CURRENT APPLICATION NUMBER: US/10/014,320
;  CURRENT FILING DATE:  2001-12-11
;  PRIOR APPLICATION NUMBER: 60/255,641
;  PRIOR FILING DATE: 2000-12-14
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-014-320-2

  Query Match             100.0%;  Score 663;  DB 6;  Length 366;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-63;
  Matches  120;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 2
US-10-833-833-6
; Sequence 6, Application US/10833833
; Publication No. US20060194210A1
; GENERAL INFORMATION:
;  APPLICANT: Morris, David W.
;  APPLICANT:  Malandro, Marc S.
;  APPLICANT:  Lai, Albert
;  APPLICANT:  Tse, Christin
;  APPLICANT:  Fattaey, Ali
;  TITLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANCER
;  FILE REFERENCE: 20366-038001
;  CURRENT APPLICATION NUMBER: US/10/833,833
;  CURRENT FILING DATE:  2004-04-27
;  NUMBER OF SEQ ID NOS: 175
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;   LENGTH: 366
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-833-833-6

  Query Match             97.0%;  Score 643;  DB 6;  Length 366;
  Best Local Similarity   96.7%;  Pred. No. 1.5e-61;
  Matches  116;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||||||||||||||||||||||||:||||||||||||||||||:||||||||
Db        247 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAENWVLEPPGFLAYECVGTCRQPPEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
               |||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||
Db        307 KWPFLGPRQCIASETDSLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 366


RESULT 3
US-10-833-833-3
; Sequence 3, Application US/10833833
; Publication No. US20060194210A1
; GENERAL INFORMATION:
;  APPLICANT: Morris, David W.
;  APPLICANT:  Malandro, Marc S.
;  APPLICANT:  Lai, Albert
;  APPLICANT:  Tse, Christin
;  APPLICANT:  Fattaey, Ali
;  TITLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANCER
;  FILE REFERENCE: 20366-038001
;  CURRENT APPLICATION NUMBER: US/10/833,833
;  CURRENT FILING DATE:  2004-04-27
;  NUMBER OF SEQ ID NOS: 175
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
;   LENGTH: 380
;   TYPE: PRT
;   ORGANISM: Mus musculus
US-10-833-833-3

  Query Match             84.3%;  Score 559;  DB 6;  Length 380;
  Best Local Similarity   82.8%;  Pred. No. 1.7e-52;
  Matches   96;  Conservative   10;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              |||:|||| |:||||||||||||:||||||||:||:||||||| |||||:| | ||:|
Db        261 AQGNCDPEVPVTEGTRCCRQEMYLDLQGMKWAENWILEPPGFLTYECVGSCLQLPESLTI 320

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPR 116
               |||||||||:|||  |||||||:||||||||||||||||||| |||||||||:||
Db        321 GWPFLGPRQCVASEMTSLPMIVSVKEGGRTRPQVVSLPNMRVQTCSCASDGALIPR 376


RESULT 4
US-11-030-653-2
; Sequence 2, Application US/11030653
; Publication No. US20060147945A1
; GENERAL INFORMATION:
;  APPLICANT: Edmonds, Brian
;  APPLICANT:  Micanovic, Radmila
;  APPLICANT:  Ou, Weijia
;  APPLICANT:  Su, Eric
;  APPLICANT:  Tschang, Sheng-Hung
;  APPLICANT:  Wang, He
;  TITLE OF INVENTION: Novel secreted proteins and their uses
;  FILE REFERENCE: X-14001
;  CURRENT APPLICATION NUMBER: US/11/030,653
;  CURRENT FILING DATE:  2005-01-06
;  NUMBER OF SEQ ID NOS: 38
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
;   LENGTH: 376
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-11-030-653-2

  Query Match             76.2%;  Score 505;  DB 7;  Length 376;
  Best Local Similarity   90.2%;  Pred. No. 1.1e-46;
  Matches   92;  Conservative    3;  Mismatches    7;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              ||||||||||:|||| || |||| |||||||||||: || |||||:|||||||| |||||
Db        247 AQGDCDPEAPVTEGTCCCHQEMYTDLQGMKWAKNWMPEPLGFLAYKCVGTCQQPLEALAF 306

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRV 102
              |||||||| |||||||||||||||||||||||||||||||||
Db        307 NWPFLGPRHCIASETASLPMIVSIKEGGRTRPQVVSLPNMRV 348


RESULT 5
US-11-356-823-22
; Sequence 22, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;      STATE:  CALIFORNIA
;      COUNTRY:  US
;      ZIP:  90067
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/11/356,823
;      FILING DATE:  17-Feb-2006
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/154,333
;      FILING DATE:  21-May-2002
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/389,705
;      FILING DATE:  03-Sep-1999
;      APPLICATION NUMBER:  09/153,733
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WETHERELL, JR. Ph.D., JOHN R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  FD2279 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 455-5100
;      TELEFAX:  (619) 455-5110
;  INFORMATION FOR SEQ ID NO:  22:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  120 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    IMMEDIATE SOURCE:
;      CLONE:  Inhibin beta B
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..120
US-11-356-823-22
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  Query Match             18.4%;  Score 122;  DB 7;  Length 120;
  Best Local Similarity   24.6%;  Pred. No. 5.7e-06;
  Matches   30;  Conservative   24;  Mismatches   42;  Indels   26;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: :|| : : |  :|:: | |:    | |:|       |  |
Db          8 ECDGRTNL-----CCRQQFFIDFRLIGW-NDWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 61

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db         62 SFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 118

Qy        107 CA 108
              ||
Db        119 CA 120


RESULT 6
US-10-505-928-109
; Sequence 109, Application US/10505928
; Publication No. US20060088532A1
; GENERAL INFORMATION:
;  APPLICANT: Ludwig Institute for Cancer Research et al.
;  TITLE OF INVENTION: LYMPHATIC ENDOTHELIAL GENES
;  FILE REFERENCE: 28967/39178
;  CURRENT APPLICATION NUMBER: US/10/505,928
;  CURRENT FILING DATE:  2004-08-27
;  PRIOR APPLICATION NUMBER: US 60/363,019
;  PRIOR FILING DATE: 2002-03-07
;  NUMBER OF SEQ ID NOS: 866
;  SOFTWARE: PatentIn 3.2
; SEQ ID NO 109
;   LENGTH: 407
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-505-928-109

  Query Match             18.4%;  Score 122;  DB 6;  Length 407;
  Best Local Similarity   24.6%;  Pred. No. 2e-05;
  Matches   30;  Conservative   24;  Mismatches   42;  Indels   26;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: :|| : : |  :|:: | |:    | |:|       |  |
Db        295 ECDGRTNL-----CCRQQFFIDFRLIGW-NDWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 348

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db        349 SFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 405

Qy        107 CA 108
              ||
Db        406 CA 407


RESULT 7
US-11-356-823-26
; Sequence 26, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;      STATE:  CALIFORNIA
;      COUNTRY:  US
;      ZIP:  90067
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/11/356,823
;      FILING DATE:  17-Feb-2006
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/154,333
;      FILING DATE:  21-May-2002
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/389,705
;      FILING DATE:  03-Sep-1999
;      APPLICATION NUMBER:  09/153,733
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WETHERELL, JR. Ph.D., JOHN R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  FD2279 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 455-5100
;      TELEFAX:  (619) 455-5110
;  INFORMATION FOR SEQ ID NO:  26:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  116 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    IMMEDIATE SOURCE:
;      CLONE:  TGF-beta 4
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..116
US-11-356-823-26

  Query Match             17.3%;  Score 114.5;  DB 7;  Length 116;
  Best Local Similarity   30.0%;  Pred. No. 3.5e-05;
  Matches   36;  Conservative   19;  Mismatches   44;  Indels   21;  Gaps    8;

Qy          4 DCDPE---APMTEGTRCCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTC-------Q 52
              | | :    | |:   || : :|||  : ::|   |: || |::|  |:| |
Db          3 DLDTDYCFGPGTDEKNCCVRPLYIDFRKDLQW--KWIHEPKGYMANFCMGPCPYIWSADT 60

Qy         53 QPPEALAF---NWPFLGPRQCIASETAS-LPMIVSIKEGGRTRPQVVSLPNMRVQKCSCA 108
              |  : ||    : |      |   :|   ||:|  :   ||   :|  | || |: | |:
Db         61 QYTKVLALYNQHNPGASAAPCCVPQTLDPLPIIYYV---GR-NVRVEQLSNMVVRACKCS 116


RESULT 8
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US-11-356-823-25
; Sequence 25, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;      STATE:  CALIFORNIA
;      COUNTRY:  US
;      ZIP:  90067
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/11/356,823
;      FILING DATE:  17-Feb-2006
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/154,333
;      FILING DATE:  21-May-2002
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/389,705
;      FILING DATE:  03-Sep-1999
;      APPLICATION NUMBER:  09/153,733
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WETHERELL, JR. Ph.D., JOHN R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  FD2279 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 455-5100
;      TELEFAX:  (619) 455-5110
;  INFORMATION FOR SEQ ID NO:  25:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  114 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    IMMEDIATE SOURCE:
;      CLONE:  TGF-beta 3
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..114
US-11-356-823-25

  Query Match             17.0%;  Score 113;  DB 7;  Length 114;
  Best Local Similarity   32.7%;  Pred. No. 5e-05;
  Matches   33;  Conservative   12;  Mismatches   44;  Indels   12;  Gaps    4;

Qy          17 CCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAFNWPFLGPRQCIASET 75
               || : :|||  | : |   || || |: |  | | |     |   :   ||    :  |
Db          17 CCVRPLYIDFRQDLGW--KWVHEPKGYYANFCSGPCPYLRSADTTHSTVLGLYNTLNPEA 74
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```
Qy          76 ASLPMIVS--------IKEGGRTRPQVVSLPNMRVQKCSCA 108
               :: |  |         :   ||| |:|  | || |: | |:
Db          75 SASPCCVPQDLEPLTILYYVGRT-PKVEQLSNMVVKSCKCS 114


RESULT 9
US-10-553-520-140
; Sequence 140, Application US/10553520
; Publication No. US20060188885A1
; GENERAL INFORMATION:
;  APPLICANT: Bodian, Dale
;  APPLICANT:  Daouti, Sherif
;  APPLICANT:  Kumar, Chandrika
;  APPLICANT:  Latario, Brian
;  APPLICANT:  Quintavalla, Joseph
;  TITLE OF INVENTION: High throughput functional genomic
;  TITLE OF INVENTION:  screening methods for osteoarthritis
;  FILE REFERENCE: 4-33178
;  CURRENT APPLICATION NUMBER: US/10/553,520
;  CURRENT FILING DATE:  2005-10-14
;  PRIOR APPLICATION NUMBER: 60/463,933
;  PRIOR FILING DATE: 2003-04-18
;  NUMBER OF SEQ ID NOS: 180
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 140
;   LENGTH: 412
;   TYPE: PRT
;   ORGANISM: homo sapiens
US-10-553-520-140

  Query Match             17.0%;  Score 113;  DB 6;  Length 412;
  Best Local Similarity   32.7%;  Pred. No. 0.00019;
  Matches   33;  Conservative   12;  Mismatches   44;  Indels   12;  Gaps    4;

Qy          17 CCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAFNWPFLGPRQCIASET 75
               || : :|||  | : |   || || |: |  | | |     |   :   ||    :  |
Db         315 CCVRPLYIDFRQDLGW--KWVHEPKGYYANFCSGPCPYLRSADTTHSTVLGLYNTLNPEA 372

Qy          76 ASLPMIVS--------IKEGGRTRPQVVSLPNMRVQKCSCA 108
               :: |  |         :   ||| |:|  | || |: | |:
Db         373 SASPCCVPQDLEPLTILYYVGRT-PKVEQLSNMVVKSCKCS 412


RESULT 10
US-11-356-823-23
; Sequence 23, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;      STATE:  CALIFORNIA
;      COUNTRY:  US
;      ZIP:  90067
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/11/356,823
;      FILING DATE:  17-Feb-2006
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/154,333
;      FILING DATE:  21-May-2002
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/389,705
;      FILING DATE:  03-Sep-1999
;      APPLICATION NUMBER:  09/153,733
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WETHERELL, JR. Ph.D., JOHN R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  FD2279 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 455-5100
;      TELEFAX:  (619) 455-5110
;  INFORMATION FOR SEQ ID NO:  23:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  114 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    IMMEDIATE SOURCE:
;      CLONE:  TGF-beta 1
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..114
US-11-356-823-23

  Query Match             16.7%;  Score 111;  DB 7;  Length 114;
  Best Local Similarity   27.9%;  Pred. No. 8.2e-05;
  Matches   31;  Conservative   16;  Mismatches   32;  Indels   32;  Gaps    6;

Qy          17 CCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTC------------------QQPPEA 57
               || :::|||  : : |   |: || |: |  |:| |                  |  | |
Db          17 CCVRQLYIDFRKDLGW--KWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGA 74

Qy          58 LAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCA 108
                |          |:      ||::  :   || :|:|  | || |: | |:
Db          75 SA-------APCCVPQALEPLPIVYYV---GR-KPKVEQLSNMIVRSCKCS 114


RESULT 11
US-11-356-823-14
; Sequence 14, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;       STATE:  CALIFORNIA
;       COUNTRY:  US
;       ZIP:  90067
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/11/356,823
;       FILING DATE:  17-Feb-2006
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US/10/154,333
;       FILING DATE:  21-May-2002
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/389,705
;       FILING DATE:  03-Sep-1999
;       APPLICATION NUMBER:  09/153,733
;       FILING DATE:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  WETHERELL, JR. Ph.D., JOHN R.
;       REGISTRATION NUMBER:  31,678
;       REFERENCE/DOCKET NUMBER:  FD2279 PCT
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (619) 455-5100
;       TELEFAX:  (619) 455-5110
;   INFORMATION FOR SEQ ID NO:  14:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  118 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
;     IMMEDIATE SOURCE:
;       CLONE:  60A
;     FEATURE:
;       NAME/KEY:  Protein
;       LOCATION:  1..118
US-11-356-823-14

  Query Match             16.7%;  Score 111;  DB 7;  Length 118;
  Best Local Similarity   28.4%;  Pred. No. 8.5e-05;
  Matches   33;  Conservative   20;  Mismatches   37;  Indels   26;  Gaps    7;

Qy         10 PMTEGTRCCR-QEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEA----------- 57
              || | || |: | :||| : : |  :|:: | |: |: | | |  |  |
Db         10 PM-ESTRSCQMQTLYIDFKDLGW-HDWIIAPEGYGAFYCSGECNFPLNAHMNATNHAIVQ 67

Qy         58 --LAFNWPFLGPRQCIA-SETASLPMIVSIKEGGRTRPQVVSLP---NMRVQKCSC 107
                :    |   |: | | :   :||::  : :      : |:|    || |: | |
Db         68 TLVHLLEPKKVPKPCCAPTRLGALPVLYHLND------ENVNLKKYRNMIVKSCGC 117


RESULT 12
US-11-048-197-8
; Sequence 8, Application US/11048197
; Publication No. US20060178506A1
;   GENERAL INFORMATION:
;        APPLICANT: GRUSKIN, ELLIOT A.
;                   BUECHTER, DOUGLAS
;                   BROKAW, JANE
;                   ZHANG, GUANGHUI
;                   PAOLELLA, DAVID
;        TITLE OF INVENTION: AMINO ACID MODIFIED POLYPEPTIDES
;        NUMBER OF SEQUENCES: 50
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: DILWORTH & BARRESE
;             STREET: 333 EARLE OVINGTON BOULEVARD
;             CITY: UNIONDALE
;             STATE: NY
;             COUNTRY: U.S.A.
;             ZIP: 11553
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/11/048,197
;             FILING DATE: 22-May-2002
;             CLASSIFICATION:
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/10/153,469
;             FILING DATE: 22-May-2002
;             APPLICATION NUMBER: US/09/169,768
;             FILING DATE: 09-OCT-1998
;        ATTORNEY/AGENT INFORMATION:
;             NAME: STEEN, JEFFREY S
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (516) 228-8484
;             TELEFAX: (516) 228-8516
;   INFORMATION FOR SEQ ID NO: 8:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 1171 amino acids
;             TYPE: amino acid
;             STRANDEDNESS: single
;             TOPOLOGY: unknown
;        MOLECULE TYPE: peptide
;        SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-11-048-197-8

  Query Match             16.7%;  Score 111;  DB 7;  Length 1171;
  Best Local Similarity   27.9%;  Pred. No. 0.00093;
  Matches   31;  Conservative   16;  Mismatches   32;  Indels   32;  Gaps    6;

Qy         17 CCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTC------------------QQPPEA 57
              || :::|||  : : |   |: || |: |  |:| |                  |  | |
Db       1074 CCVRQLYIDFRKDLGW--KWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGA 1131

Qy         58 LAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCA 108
               |          |:      ||::  :   || :|:|  | || |: | |:
Db       1132 SA-------APCCVPQALEPLPIVYYV---GR-KPKVEQLSNMIVRSCKCS 1171


RESULT 13
US-11-356-823-18
; Sequence 18, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;      STATE:  CALIFORNIA
;      COUNTRY:  US
;      ZIP:  90067
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/11/356,823
;      FILING DATE:  17-Feb-2006
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/154,333
;      FILING DATE:  21-May-2002
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/389,705
;      FILING DATE:  03-Sep-1999
;      APPLICATION NUMBER:  09/153,733
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WETHERELL, JR. Ph.D., JOHN R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  FD2279 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 455-5100
;      TELEFAX:  (619) 455-5110
;  INFORMATION FOR SEQ ID NO:  18:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  119 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    IMMEDIATE SOURCE:
;      CLONE:  BMP-3
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..119
US-11-356-823-18

  Query Match             16.5%;  Score 109.5;  DB 7;  Length 119;
  Best Local Similarity   28.6%;  Pred. No. 0.00012;
  Matches   32;  Conservative   15;  Mismatches   42;  Indels   23;  Gaps    6;

Qy         13 EGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP-PEALAFNWP-------- 63
              |   | |: : :|   : |:: |   |  | || | | || | |::|    |
Db         13 EPRNCARRYLKVDFADIGWSE-WIISPKSFDAYYCSGACQFPMPKSLK---PSNHATIQS 68

Qy         64 ---FLG-----PRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSC 107
                  :|     |  |   |  |   |:   |      :|   ||| |: |:|
Db         69 IVRAVGVVPGIPEPCCVPEKMSSLSILFFDENKNVVLKV--YPNMTVESCAC 118
```

```
RESULT 14
US-11-356-823-24
; Sequence 24, Application US/11356823
; Publication No. US20060140941A1
;  GENERAL INFORMATION:
;    APPLICANT:  JOHNS HOPKINS UNIVERSITY
;    TITLE OF INVENTION:  GROWTH DIFFERENTIATION FACTOR-3
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SPENSLEY HORN JUBAS & LUBITZ
;      STREET:  1880 CENTURY PARK EAST, FIFTH FLOOR
;      CITY:  LOS ANGELES
;      STATE:  CALIFORNIA
;      COUNTRY:  US
;      ZIP:  90067
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/11/356,823
;      FILING DATE:  17-Feb-2006
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/154,333
;      FILING DATE:  21-May-2002
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/389,705
;      FILING DATE:  03-Sep-1999
;      APPLICATION NUMBER:  09/153,733
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WETHERELL, JR. Ph.D., JOHN R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  FD2279 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 455-5100
;      TELEFAX:  (619) 455-5110
;  INFORMATION FOR SEQ ID NO:  24:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  114 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    IMMEDIATE SOURCE:
;      CLONE:  TGF-beta 2
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..114
US-11-356-823-24

  Query Match             15.8%;  Score 105;  DB 7;  Length 114;
  Best Local Similarity   27.0%;  Pred. No. 0.00036;
  Matches   30;  Conservative   16;  Mismatches   33;  Indels   32;  Gaps    6;

Qy         17 CCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTCQQ------------------PPEA 57
              || : :|||  : : |   |: || |: |  | | |                     |||
Db         17 CCLRPLYIDFKRDLGW--KWIHEPKGYNANFCAGACPYLWSSDTQHSRVLSLYNTINPEA 74
```

```
Qy          58 LAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCA 108
                |          |:: :   | ::  |   |:| |::  | || |: | |:
Db          75 SA-------SPCCVSQDLEPLTILYYI---GKT-PKIEQLSNMIVKSCKCS 114


RESULT 15
US-10-833-833-14
; Sequence 14, Application US/10833833
; Publication No. US20060194210A1
; GENERAL INFORMATION:
;  APPLICANT: Morris, David W.
;  APPLICANT:  Malandro, Marc S.
;  APPLICANT:  Lai, Albert
;  APPLICANT:  Tse, Christin
;  APPLICANT:  Fattaey, Ali
;  TITLE OF INVENTION: NOVEL THERAPEUTIC TARGETS IN CANCER
;  FILE REFERENCE: 20366-038001
;  CURRENT APPLICATION NUMBER: US/10/833,833
;  CURRENT FILING DATE:  2004-04-27
;  NUMBER OF SEQ ID NOS: 175
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
;   LENGTH: 414
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-833-833-14

  Query Match             15.8%;  Score 105;  DB 6;  Length 414;
  Best Local Similarity   27.0%;  Pred. No. 0.0014;
  Matches   30;  Conservative   16;  Mismatches   33;  Indels   32;  Gaps    6;

Qy          17 CCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTCQQ------------------PPEA 57
               || : :|||  : : |   |: || |: |  | | |                     |||
Db         317 CCLRPLYIDFKRDLGW--KWIHEPKGYNANFCAGACPYLWSSDTQHSRVLSLYNTINPEA 374

Qy          58 LAFNWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCA 108
                |          |:: :   | ::  |   |:| |::  | || |: | |:
Db         375 SA-------SPCCVSQDLEPLTILYYI---GKT-PKIEQLSNMIVKSCKCS 414


Search completed: September  7, 2006, 00:15:58
Job time : 34 secs
```

SCORE Searcl

This page gives you Search Results detail for the Application 10684209 and Search Result us-10-684-209-2.rpr.
start

```
                              GenCore version 5.1.9
                   Copyright (c) 1993 - 2006  Biocceleration Ltd.


OM protein - protein search, using sw model

Run on:          September  7, 2006, 00:05:48 ; Search time 39 Seconds
                                             (without alignments)
                                             296.052 Million cell updates/sec

Title:           US-10-684-209-2
Perfect score:   663
Sequence:        1 AQGDCDPEAPMTEGTRCCRQ..........RVQKCSCASDGALVPRRLQP 120

Scoring table:   BLOSUM62
                 Gapop 10.0 , Gapext 0.5

Searched:        283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters:      283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :        PIR_80:*
                 1:  pir1:*
                 2:  pir2:*
                 3:  pir3:*
                 4:  pir4:*

      Pred. No. is the number of results predicted by chance to have a
      score greater than or equal to the score of the result being printed,
      and is derived by analysis of the total score distribution.

                                      SUMMARIES
                   %
Result             Query
   No.   Score     Match Length DB  ID                          Description
 ----------------------------------------------------------------------------
     1     582     87.8    368  2  S67507                      morphogen lefty pr
     2   145.5     21.9    350  2  JC5241                      activin beta E cha
     3   129.5     19.5    115  2  PN0505                      activin beta B-1 c
     4   129.5     19.5    115  2  PN0506                      activin beta B-2 c
     5   128.5     19.4    393  2  I50103                      activin beta B - z
     6     128     19.3    255  2  I48235                      inhibin beta-B cha
     7     128     19.3    411  2  B41398                      inhibin beta-B cha
     8     127     19.2    365  2  T43286                      cet-1 protein - Ca
     9      124     18.7     370   2   I51199                             activin beta B sub
    10      123     18.6     349   1   WFPGBB                             inhibin beta-B cha
    11      122     18.4     407   1   A40150                             inhibin beta-B cha
    12      122     18.4     408   2   S50899                             betaB inhibin prec
    13    117.5     17.7     352   2   JC2466                             inhibin beta-C cha
    14      117     17.6     379   2   T29518                             hypothetical prote
    15    114.5     17.3     373   2   A41918                             transforming growt
    16    114.5     17.3     412   2   A34939                             transforming growt
    17      113     17.0     360   1   A25732                             inhibin alpha chai
    18      113     17.0     410   2   A41397                             transforming growt
    19      113     17.0     412   2   A36169                             transforming growt
    20      111     16.7     315   2   A40057                             transforming growt
    21      111     16.7     390   1   WFHU2                              transforming growt
    22      111     16.7     390   1   WFMS2                              transforming growt
    23      111     16.7     390   2   A26960                             transforming growt
    24      111     16.7     390   2   JC4023                             transforming growt
    25      111     16.7     390   2   A27512                             transforming growt
    26      111     16.7     390   2   I46463                             transforming growt
    27      111     16.7     390   2   S10219                             transforming growt
    28      111     16.7     391   2   S01413                             transforming growt
    29      111     16.7     455   2   A43918                             TGF-beta-related p
    30    110.5     16.7     352   2   S70580                             activin beta C pre
    31      110     16.6     410   2   A55706                             transforming growt
    32    109.5     16.5     352   2   JC5366                             activin beta C - m
    33    109.5     16.5     472   1   BMHU3                              bone morphogenetic
    34    108.5     16.4     366   1   A40056                             inhibin alpha chai
    35    108.5     16.4     366   1   JC1106                             inhibin alpha chai
    36      108     16.3     373   2   PW0042                             activin - fruit fl
    37    107.5     16.2     360   2   I53032                             bone morphogenetic
    38    107.5     16.2     366   2   T03907                             TGF-beta-related p
    39    106.5     16.1     413   2   JC4862                             activin beta-A cha
    40      106     16.0     130   2   I48196                             transforming growt
    41      106     16.0     328   2   I51215                             inhibin alpha-subu
    42      106     16.0     413   1   WFXLB2                             transforming growt
    43    105.5     15.9     367   2   JC4151                             activin beta D cha
    44      105     15.8     112   2   A61439                             transforming growt
    45      105     15.8     409   2   S01825                             transforming growt


                                        ALIGNMENTS


RESULT 1
S67507
morphogen lefty precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change 09-Jul-2004
C;Accession: S67507
R;Meno, C.; Saijoh, Y.; Fujii, H.; Ikeda, M.; Yokoyama, T.; Yokoyama, M.; Toyoda, Y.; Hamada, H.
Nature 381, 151-155, 1996
A;Title: Left-right asymmetric expression of the TGF-beta-family member lefty in mouse embryos.
A;Reference number: S67507; MUID:96202359; PMID:8610011
A;Accession: S67507
A;Molecule type: mRNA
A;Residues: 1-368
A;Cross-references: UNIPROT:Q64280; UNIPARC:UPI0000024301; EMBL:D83921; NID:g1325920; PIDN:BAA1212
A;Note: the authors translated the codon ACG for residue 241 as His
C;Keywords: growth factor
F;78-368/Product: morphogen lefty #status predicted
F;136-368/Product: morphogen lefty #status predicted
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  Query Match             87.8%;  Score 582;  DB 2;  Length 368;
  Best Local Similarity   84.2%;  Pred. No. 2e-52;
  Matches  101;  Conservative   10;  Mismatches    9;  Indels    0;  Gaps    0;

Qy          1 AQGDCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAF 60
              |||:||||||:||||||||||||:||||||||:||:||||||| |||||:| | ||:|
Db        249 AQGNCDPEAPVTEGTRCCRQEMYLDLQGMKWAENWILEPPGFLTYECVGSCLQLPESLTS 308

Qy         61 NWPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCSCASDGALVPRRLQP 120
               |||||||||:|||  |||||||:||||||||||||||||||| |||||||||:||||||
Db        309 RWPFLGPRQCVASEMTSLPMIVSVKEGGRTRPQVVSLPNMRVQTCSCASDGALIPRRLQP 368


RESULT 2
JC5241
activin beta E chain precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 25-Apr-1997 #sequence_revision 09-May-1997 #text_change 09-Jul-2004
C;Accession: JC5241; JC5367
R;Fang, J.; Yin, W.; Smiley, E.; Wang, S.Q.; Bonadio, J.
Biochem. Biophys. Res. Commun. 228, 669-674, 1996
A;Title: Molecular cloning of the mouse activin beta E subunit gene.
A;Reference number: JC5241; MUID:97096313; PMID:8941337
A;Contents: liver
A;Accession: JC5241
A;Molecule type: mRNA
A;Residues: 1-350
A;Cross-references: UNIPROT:O08717; UNIPARC:UPI0000027A55; GB:U96386; NID:g2072521; PIDN:AAB53801..
R;Fang, J.; Wang, S.; Smiley, E.; Bonadio, J.
Biochem. Biophys. Res. Commun. 231, 655-661, 1997
A;Title: Genes coding for mouse activin beta C and beta E are closely linked and exhibit a liver-s
A;Reference number: JC5366; MUID:97224404; PMID:9070865
A;Accession: JC5367
A;Molecule type: DNA
A;Residues: 1-350
A;Cross-references: UNIPARC:UPI0000027A55; GB:U96386; NID:g2072521; PIDN:AAB53801.1; PID:g2072522
C;Genetics:
A;Introns: 99/3
C;Superfamily: inhibin

  Query Match             21.9%;  Score 145.5;  DB 2;  Length 350;
  Best Local Similarity   27.6%;  Pred. No. 1.9e-07;
  Matches   34;  Conservative   21;  Mismatches   37;  Indels   31;  Gaps    7;

Qy          5 CDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPE-------A 57
              |:|| |:     |||:: |:| | : | ::|:|:| |:    | | |  ||        |
Db        240 CEPETPL-----CCRRDHYVDFQELGW-RDWILQPEGYQLNYCSGQC--PPHLAGSPGIA 291

Qy         58 LAFN------------WPFLGPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKC 105
               :|:            ||  |   |: :    | ::     |     :|   |:| |: |
Db        292 ASFHSAVFSLLKANNPWP-AGSSCCVPTARRPLSLLYLDHNGNVVKTDV---PDMVVEAC 347

Qy        106 SCA 108
               |:
Db        348 GCS 350


RESULT 3
PN0505
activin beta B-1 chain - goldfish (fragment)
N;Alternate names: gact 2
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```
C;Species: Carassius auratus (goldfish)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 31-Dec-2004
C;Accession: PN0505
R;Ge, W.; Gallin, W.J.; Strobeck, C.; Peter, R.E.
Biochem. Biophys. Res. Commun. 193, 711-717, 1993
A;Title: Cloning and sequencing of goldfish activin subunit genes: Strong structural conservation
A;Reference number: PN0504; MUID:93290666; PMID:8512569
A;Accession: PN0505
A;Molecule type: DNA
A;Residues: 1-115
A;Cross-references: UNIPROT:Q9PWR8; UNIPARC:UPI000017654D

  Query Match             19.5%;  Score 129.5;  DB 2;  Length 115;
  Best Local Similarity   26.4%;  Pred. No. 2.8e-06;
  Matches   32;  Conservative   22;  Mismatches   42;  Indels   25;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||     | |  ||||: ||| : : |  :|:: | |:    | |:|       |  |
Db          3 ECDG----TNGGLCCRQQFYIDFRLIGW-NDWIIAPAGYYGNYCEGSCPAYMAGVPGSAS 57

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db         58 SFHTAVVNQYRMRGISPGSVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 114

Qy        107 C 107
              |
Db        115 C 115


RESULT 4
PN0506
activin beta B-2 chain - goldfish (fragment)
N;Alternate names: gact 11
C;Species: Carassius auratus (goldfish)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 31-Dec-2004
C;Accession: PN0506
R;Ge, W.; Gallin, W.J.; Strobeck, C.; Peter, R.E.
Biochem. Biophys. Res. Commun. 193, 711-717, 1993
A;Title: Cloning and sequencing of goldfish activin subunit genes: Strong structural conservation
A;Reference number: PN0504; MUID:93290666; PMID:8512569
A;Accession: PN0506
A;Molecule type: DNA
A;Residues: 1-115
A;Cross-references: UNIPROT:Q9PWR8; UNIPARC:UPI000017654E

  Query Match             19.5%;  Score 129.5;  DB 2;  Length 115;
  Best Local Similarity   26.4%;  Pred. No. 2.8e-06;
  Matches   32;  Conservative   22;  Mismatches   42;  Indels   25;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||     | |  ||||: ||| : : |  :|:: | |:    | |:|       |  |
Db          3 ECDG----TNGGLCCRQQFYIDFRLIGW-NDWIIAPAGYYGNYCEGSCPAFLAGVPGSAS 57

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db         58 SFHTAVVNQYRMRGMSPGSVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 114

Qy        107 C 107
              |
Db        115 C 115
```

```
RESULT 5
I50103
activin beta B - zebra fish
C;Species: Brachydanio rerio (zebra fish)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
C;Accession: I50103
R;Wittbrodt, J.; Rosa, F.M.
Genes Dev. 8, 1448-1462, 1994
A;Title: Disruption of mesoderm and axis formation in fish by ectopic expression of activin varian
A;Reference number: I50103; MUID:95011555; PMID:7926744
A;Accession: I50103
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-393
A;Cross-references: UNIPROT:Q90261; UNIPARC:UPI00000FB957; EMBL:X76051; NID:g516356; PIDN:CAA53636
C;Genetics:
A;Gene: ZactbetaB
C;Superfamily: inhibin

  Query Match             19.4%;  Score 128.5;  DB 2;  Length 393;
  Best Local Similarity   26.2%;  Pred. No. 1.2e-05;
  Matches   32;  Conservative   22;  Mismatches   43;  Indels   25;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||       |  ||||: ||| : : |  :|:: | |:    | |:|       |  |
Db        280 ECDG----NNGGLCCRQQFYIDFRLIGW-NDWIIAPAGYYGNYCEGSCPAYMAGVPGSAS 334

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db        335 SFHTAVVNQYRMRGMSPGSVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 391

Qy        107 CA 108
              ||
Db        392 CA 393


RESULT 6
I48235
inhibin beta-B chain - mouse (fragment)
N;Alternate names: activin bB chain
C;Species: Mus musculus (house mouse)
C;Date: 02-Jul-1996 #sequence_revision 01-Aug-1997 #text_change 09-Jul-2004
C;Accession: I48235; I48266; S31441
R;Ritvos, O.; Tuuri, T.; Eramaa, M.; Sainio, K.; Hilden, K.; Saxen, L.; Gilbert, S.F.
Mech. Dev. 50, 229-245, 1995
A;Title: Activin disrupts epithelial branching morphogenesis in developing glandular organs of the
A;Reference number: I48235; MUID:95344997; PMID:7619733
A;Accession: I48235
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-234
A;Cross-references: UNIPROT:Q04999; UNIPARC:UPI000016CBD2; EMBL:X83376; NID:g603571; PIDN:CAA58290
R;Albano, R.M.; Groome, N.; Smith, J.C.
Development 117, 711-723, 1993
A;Title: Activins are expressed in preimplantation mouse embryos and in ES and EC cells and are re
A;Reference number: I48243; MUID:93321614; PMID:8330535
A;Accession: I48266
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 134,'D',136-255
```

```
A;Cross-references: UNIPARC:UPI000016CC30; EMBL:X69620; NID:g50147; PIDN:CAA49326.1; PID:g50148
C;Superfamily: inhibin

  Query Match             19.3%;  Score 128;  DB 2;  Length 255;
  Best Local Similarity   27.0%;  Pred. No. 8.9e-06;
  Matches   33;  Conservative   22;  Mismatches   41;  Indels   26;  Gaps    6;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: :|| : : |  :|:: | |:    | |:|       |  |
Db        143 ECDGRTSL-----CCRQQFFIDFRLIGW-NDWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 196

Qy         59 AFNWPFL-----------GPRQ--CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :          ||    || :: :|: |:    |    :  |   ||| |::|
Db        197 SFHTAVVNQYRMRGLNPGPVNSCCIPTKLSSMSMLYFDDEYNIVKRDV---PNMIVEECG 253

Qy        107 CA 108
              ||
Db        254 CA 255


RESULT 7
B41398
inhibin beta-B chain precursor - rat
N;Alternate names: inhibin/activin beta B-chain
C;Species: Rattus norvegicus (Norway rat)
C;Date: 03-Apr-1992 #sequence_revision 01-Aug-1997 #text_change 09-Jul-2004
C;Accession: B41398; I53288; C40905
R;Feng, Z.M.; Li, Y.P.; Chen, C.L.C.
Mol. Endocrinol. 3, 1914-1925, 1989
A;Title: Analysis of the 5'-flanking regions of rat inhibin alpha- and beta-B-subunit genes sugges
A;Reference number: A41398; MUID:90190649; PMID:2628729
A;Accession: B41398
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-174
A;Cross-references: UNIPROT:P17491; UNIPARC:UPI000012D429; GB:M32756; GB:M32757; NID:g204943; PIDN
R;Dykema, J.C.; Mayo, K.E.
Endocrinology 135, 702-711, 1994
A;Title: Two messenger ribonucleic acids encoding the common beta B-chain of inhibin and activin h
A;Reference number: I53288; MUID:94307180; PMID:8033818
A;Accession: I53288
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-7
A;Cross-references: UNIPARC:UPI000017654F; GB:S72477; NID:g619268
R;Esch, F.S.; Shimasaki, S.; Cooksey, K.; Mercado, M.; Mason, A.J.; Ying, S.Y.; Ueno, N.; Ling, N.
Mol. Endocrinol. 1, 388-396, 1987
A;Title: Complementary deoxyribonucleic acid (cDNA) cloning and DNA sequence analysis of rat ovari
A;Reference number: A40905; MUID:90331931; PMID:2484214
A;Accession: C40905
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 133-411
A;Cross-references: UNIPARC:UPI0000176550
C;Superfamily: inhibin

  Query Match             19.3%;  Score 128;  DB 2;  Length 411;
  Best Local Similarity   27.0%;  Pred. No. 1.4e-05;
  Matches   33;  Conservative   22;  Mismatches   41;  Indels   26;  Gaps    6;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
```

```
              :||    :     ||||: :|| : : |  :|:: | |:    | |:|       |  |
Db        299 ECDGRTSL-----CCRQQFFIDFRLIGW-NDWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 352

Qy         59 AFNWPFL----------GPRQ--CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :          ||    || :: :|: |:    |    :  |   ||| |::|
Db        353 SFHTAVVNQYRMRGLNPGPVNSCCIPTKLSSMSMLYFDDEYNIVKRDV---PNMIVEECG 409

Qy        107 CA 108
              ||
Db        410 CA 411


RESULT 8
T43286
cet-1 protein - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004
C;Accession: T43286
R;Morita, K.; Chow, K.L.; Ueno, N.
Development 126, 1337-1347, 1999
A;Title: Regulation of body length and male tail ray pattern formation of Caenorhabditis elegans b
A;Reference number: Z22393; MUID:99146896; PMID:10021351
A;Accession: T43286
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-365
A;Cross-references: UNIPROT:O76514; UNIPARC:UPI00000815EC; EMBL:AF074395; NID:g3328181; PIDN:AAC26
C;Genetics:
A;Gene: cet-1
A;Map position: 5
C;Superfamily: inhibin

  Query Match             19.2%;  Score 127;  DB 2;  Length 365;
  Best Local Similarity   26.7%;  Pred. No. 1.6e-05;
  Matches   31;  Conservative   20;  Mismatches   33;  Indels   32;  Gaps    6;

Qy         13 EGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQP-PEAL-AFNWPFL----- 65
              |   | | : |:|   : | ::|:: | |: ||:| |:|  | |  | | |   :
Db        260 ESNLCRRTDFYVDFDDLNW-QDWIMAPKGYDAYQCQGSCPNPMPAQLNATNHAIIQSLLH 318

Qy         66 -------GPRQCIASETASLPM-------IVSIKEGGRTRPQVVSLPNMRVQKCSC 107
                      |  |: :||: | :       :: |:|            :|||: | |
Db        319 SLRPDEVPPPCCVPTETSPLSILYMDVDKVIVIRE----------YADMRVESCGC 364


RESULT 9
I51199
activin beta B subunit - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
C;Accession: I51199
R;Dohrmann, C.E.; Hemmati-Brivanlou, A.; Thomsen, G.H.; Fields, A.; Woolf, T.M.; Melton, D.A.
Dev. Biol. 157, 474-483, 1993
A;Title: Expression of activin mRNA during early development in Xenopus laevis.
A;Reference number: I51199; MUID:93273083; PMID:8500654
A;Accession: I51199
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-370
A;Cross-references: UNIPROT:Q91350; UNIPARC:UPI00000FCC87; GB:S61773; NID:g386027; PIDN:AAB26863.1
C;Superfamily: inhibin
```

```
  Query Match             18.7%;  Score 124;  DB 2;  Length 370;
  Best Local Similarity   25.4%;  Pred. No. 3.3e-05;
  Matches   31;  Conservative   22;  Mismatches   43;  Indels   26;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: ||| : : |  :|:: | |:    | |:|       |  |
Db        258 ECDGHTNL-----CCRQQFYIDFRLIGW-NDWIIAPAGYYGNYCEGSCPAYLAGVPGSAS 311

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| | :|
Db        312 SFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVDECG 368

Qy        107 CA 108
              ||
Db        369 CA 370


RESULT 10
WFPGBB
inhibin beta-B chain precursor - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 30-Jun-1987 #sequence_revision 30-Jun-1987 #text_change 09-Jul-2004
C;Accession: A01394
R;Mason, A.J.; Hayflick, J.S.; Ling, N.; Esch, F.; Ueno, N.; Ying, S.Y.; Guillemin, R.; Niall, H.;
Nature 318, 659-663, 1985
A;Title: Complementary DNA sequences of ovarian follicular fluid inhibin show precursor structure
A;Reference number: A93371; MUID:86092207; PMID:2417121
A;Accession: A01394
A;Molecule type: mRNA
A;Residues: 1-349
A;Cross-references: UNIPROT:P04088; UNIPARC:UPI000012D428; GB:X03267; NID:g2005; PIDN:CAA27021.1;
C;Comment: The source of this protein is ovarian follicular fluid.
C;Comment: The mature protein is the carboxyl-terminal segment of a precursor polypeptide; the act
C;Comment: Inhibin is secreted by ovaries or testes and inhibits the secretion of follitropin by t
C;Superfamily: inhibin
C;Keywords: contraceptive; follitropin inhibitor; glycoprotein; gonad
F;1-234/Domain: propeptide (fragment) #status predicted
F;235-349/Product: inhibin beta-B chain #status predicted
F;35/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             18.6%;  Score 123;  DB 1;  Length 349;
  Best Local Similarity   24.6%;  Pred. No. 4e-05;
  Matches   30;  Conservative   25;  Mismatches   41;  Indels   26;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: :|| : : |: :|:: | |:    | |:|       |  |
Db        237 ECDGRTNL-----CCRQQFFIDFRLIGWS-DWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 290

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db        291 SFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 347

Qy        107 CA 108
              ||
Db        348 CA 349


RESULT 11
A40150
inhibin beta-B chain precursor - human
```

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N;Alternate names: activin AB chain B
C;Species: Homo sapiens (man)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: A40150; C24248; A40156; S10751
R;Mason, A.J.; Berkemeier, L.M.; Schmelzer, C.H.; Schwall, R.H.
Mol. Endocrinol. 3, 1352-1358, 1989
A;Title: Activin B: precursor sequences, genomic structure and in vitro activities.
A;Reference number: A40150; MUID:90114200; PMID:2575216
A;Accession: A40150
A;Molecule type: DNA
A;Residues: 1-407
A;Cross-references: UNIPROT:P09529; UNIPARC:UPI000012D427; GB:M31668; GB:M31669; NID:g186419; PIDN
R;Mason, A.J.; Niall, H.D.; Seeburg, P.H.
Biochem. Biophys. Res. Commun. 135, 957-964, 1986
A;Title: Structure of two human ovarian inhibins.
A;Reference number: A90123; MUID:86186863; PMID:3754442
A;Accession: C24248
A;Molecule type: mRNA
A;Residues: 55-407
A;Cross-references: UNIPARC:UPI0000141F42; GB:M13437; NID:g186416; PIDN:AAA59169.1; PID:g186417
R;Feng, Z.M.; Bardin, C.W.; Chen, C.L.C.
Mol. Endocrinol. 3, 939-948, 1989
A;Title: Characterization and regulation of testicular inhibin beta-subunit mRNA.
A;Reference number: A40156; MUID:89295443; PMID:2739657
A;Accession: A40156
A;Molecule type: mRNA
A;Residues: 22-46,'A',48-407
A;Cross-references: UNIPARC:UPI000016AB16; GB:M31632
A;Experimental source: testis
R;Schmelzer, C.H.; Burton, L.E.; Tamony, C.M.; Schwall, R.H.; Mason, A.J.; Liegeois, N.
Biochim. Biophys. Acta 1039, 135-141, 1990
A;Title: Purification and characterization of recombinant human activin B.
A;Reference number: S10751; MUID:90304183; PMID:2364091
A;Accession: S10751
A;Molecule type: protein
A;Residues: 293-294,'GX',297-302,'XX',305-307
A;Cross-references: UNIPARC:UPI000017337C
C;Comment: Activins A and B are homodimers of inhibin beta-A or inhibin beta-B, respectively, whil
C;Genetics:
A;Gene: GDB:INHBB
A;Cross-references: GDB:119347; OMIM:147390
A;Map position: 2cen-2q13
C;Superfamily: inhibin
C;Keywords: glycoprotein; gonad; heterodimer; homodimer; hormone
F;1-20/Domain: signal sequence #status predicted
F;21-292/Domain: propeptide #status predicted
F;293/Product: inhibin beta-B chain #status predicted
F;93/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match            18.4%;  Score 122;  DB 1;  Length 407;
  Best Local Similarity  24.6%;  Pred. No. 5.9e-05;
  Matches   30;  Conservative   24;  Mismatches   42;  Indels   26;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: :|| : : |  :|:: | |:    | |:|       |  |
Db        295 ECDGRTNL-----CCRQQFFIDFRLIGW-NDWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 348

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db        349 SFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 405
```

```
Qy        107 CA 108
              ||
Db        406 CA 407


RESULT 12
S50899
betaB inhibin precursor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 01-Aug-1995 #sequence_revision 01-Sep-1995 #text_change 09-Jul-2004
C;Accession: S50899
R;Thompson, D.A.; Cronin, C.N.; Martin, F.
Eur. J. Biochem. 226, 751-764, 1994
A;Title: Genomic cloning and sequence analyses of the bovine alpha-, beta(A)- and beta(B)-inhibin/
A;Reference number: S50897; MUID:95112839; PMID:7813465
A;Accession: S50899
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-408
A;Cross-references: UNIPROT:P42917; UNIPARC:UPI000012D425; EMBL:U16240
C;Genetics:
A;Introns: 151/1
C;Superfamily: inhibin

  Query Match             18.4%;  Score 122;  DB 2;  Length 408;
  Best Local Similarity   24.6%;  Pred. No. 5.9e-05;
  Matches   30;  Conservative   24;  Mismatches   42;  Indels   26;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQ-----PPEAL 58
              :||    :     ||||: :|| : : |  :|:: | |:    | |:|     |  |
Db        296 ECDGRTNL-----CCRQQFFIDFRLIGW-NDWIIAPTGYYGNYCEGSCPAYLAGVPGSAS 349

Qy         59 AFNWPFLGPRQ------------CIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKCS 106
              :|:   :   :            || :: ::: |:    |    :  |   ||| |::|
Db        350 SFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYNIVKRDV---PNMIVEECG 406

Qy        107 CA 108
              ||
Db        407 CA 408


RESULT 13
JC2466
inhibin beta-C chain precursor - human
N;Alternate names: activin beta C chain
C;Species: Homo sapiens (man)
C;Date: 29-Mar-1995 #sequence_revision 26-May-1995 #text_change 09-Jul-2004
C;Accession: JC2466
R;Hoetten, G.; Neidhardt, H.; Schneider, C.; Pohl, J.
Biochem. Biophys. Res. Commun. 206, 608-613, 1995
A;Title: Cloning of a new member of the TGF-beta family: A putative new activin betaC chain.
A;Reference number: JC2466; MUID:95126961; PMID:7826378
A;Accession: JC2466
A;Molecule type: mRNA
A;Residues: 1-352
A;Cross-references: UNIPROT:P55103; UNIPARC:UPI000012D42A; GB:X82540; NID:g669154; PIDN:CAA57890.1
A;Experimental source: liver
C;Genetics:
A;Gene: GDB:INHBC
A;Cross-references: GDB:632884
A;Map position: 2cen-2q13
```

```
C;Superfamily: inhibin
C;Keywords: glycoprotein
F;1-18/Domain: signal sequence #status predicted
F;19-236/Domain: propeptide #status predicted
F;237-352/Product: activin beta C #status predicted
F;110,143,161/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             17.7%;  Score 117.5;  DB 2;  Length 352;
  Best Local Similarity   22.8%;  Pred. No. 0.00015;
  Matches   28;  Conservative   24;  Mismatches   44;  Indels   27;  Gaps    5;

Qy          4 DCDPEAPMTEGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQ-----QPPEAL 58
              ||   : |     ||||| ::| : : |  :|:::| |:    |:| |       |  |
Db        239 DCQGGSRM-----CCRQEFFVDFREIGW-HDWIIQPEGYAMNFCIGQCPLHIAGMPGIAA 292

Qy         59 AFNWPFL-------------GPRQCIASETASLPMIVSIKEGGRTRPQVVSLPNMRVQKC 105
              :|:   |             |   |: :    | ::   ::    :     :|:| |: |
Db        293 SFHTAVLNLLKANTAAGTTGGGSCCVPTARRPLSLLYYDRDSNIVK---TDIPDMVVEAC 349

Qy        106 SCA 108
               |:
Db        350 GCS 352


RESULT 14
T29518
hypothetical protein T25F10.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T29518
R;Pauley, A.; Gattung, S.
submitted to the EMBL Data Library, July 1996
A;Description: The sequence of C. elegans cosmid T25F10.
A;Reference number: Z20634
A;Accession: T29518
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-379
A;Cross-references: UNIPROT:O02424; UNIPARC:UPI000017656E; EMBL:U64856; PIDN:AAB04986.1; GSPDB:GN0
A;Experimental source: strain Bristol N2; clone T25F10
C;Genetics:
A;Gene: CESP:T25F10.2
A;Map position: 5
A;Introns: 96/3; 129/3; 153/3; 250/3; 286/1; 324/3; 362/2
C;Superfamily: inhibin

  Query Match             17.6%;  Score 117;  DB 2;  Length 379;
  Best Local Similarity   21.4%;  Pred. No. 0.00018;
  Matches   28;  Conservative   20;  Mismatches   35;  Indels   48;  Gaps    4;

Qy         13 EGTRCCRQEMYIDLQGMKWAKNWVLEPPGFLAYECVGTCQQPPEALAFNWPFLGPRQCIA 72
              |   | | : |:|   : | ::|:: | |: ||:| |:|  |            | |  |
Db        260 ESNLCRRTDFYVDFDDLNW-QDWIMAPKGYDAYQCQGSCPNPM-----------PAQLNA 307

Qy         73 SETASLPMIV-SIKEGGRTRPQVVSL---------------------------------- 97
              :  | :  :: |::   :|| :   |
Db        308 TNHAIIQSLLHSLRPDEKTRKETTKLIPHPKIFFRYRHLAVCLLKRALFRFSTWIIVIRE 367

Qy         98 -PNMRVQKCSC 107
                :|||: | |
Db        368 YADMRVESCGC 378
```

```
RESULT 15
A41918
transforming growth factor beta-4 precursor - chicken (fragment)
N;Alternate names: TGF-beta 4
C;Species: Gallus gallus (chicken)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C;Accession: A41918; A34941; S03110
R;Burt, D.W.; Jakowlew, S.B.
Mol. Endocrinol. 6, 989-992, 1992
A;Title: Correction: a new interpretation of a chicken transforming growth factor-beta 4 complemen
A;Reference number: A41918; MUID:92357039; PMID:1353860
A;Accession: A41918
A;Molecule type: mRNA
A;Residues: 1-373
A;Cross-references: UNIPROT:P09531; UNIPARC:UPI0000136CAF; GB:M31160; GB:X08012; GB:S41706; NID:g1
A;Note: sequence extracted from NCBI backbone (NCBIN:110186, NCBIP:110187)
A;Note: this report corrects and reinterprets the sequence from reference A34941
R;Jakowlew, S.B.; Dillard, P.J.; Sporn, M.B.; Roberts, A.B.
Mol. Endocrinol. 2, 1186-1195, 1988
A;Title: Complementary deoxyribonucleic acid cloning of a messenger ribonucleic acid encoding tran
A;Reference number: A34941; MUID:89112198; PMID:2464131
A;Accession: A34941
A;Molecule type: mRNA
A;Residues: 'MDPMSIGPKSCGGSPWRPPGTAPWSIGSRRATASSSCSTSSRVRAEVGGRAL',122-209,'D',211-373
A;Cross-references: UNIPARC:UPI000014291F; EMBL:X08012
A;Note: this sequence has been corrected in A41918
C;Superfamily: inhibin
C;Keywords: glycoprotein; growth factor
F;1/Domain: signal sequence (fragment) #status predicted
F;223-225/Region: cell attachment (R-G-D) motif
F;260-373/Product: transforming growth factor beta-4 #status predicted
F;54,109,153/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             17.3%;  Score 114.5;  DB 2;  Length 373;
  Best Local Similarity   30.0%;  Pred. No. 0.00032;
  Matches   36;  Conservative   19;  Mismatches   44;  Indels   21;  Gaps    8;

Qy          4 DCDPE---APMTEGTRCCRQEMYIDL-QGMKWAKNWVLEPPGFLAYECVGTC-------Q 52
              | | :    | |:   || : :|||  : ::|   |: || |::|  |:| |
Db        260 DLDTDYCFGPGTDEKNCCVRPLYIDFRKDLQW--KWIHEPKGYMANFCMGPCPYIWSADT 317

Qy         53 QPPEALAF---NWPFLGPRQCIASETAS-LPMIVSIKEGGRTRPQVVSLPNMRVQKCSCA 108
              |  : ||    : |      |   :|   ||:|  :   ||   :|  | || |: | |:
Db        318 QYTKVLALYNQHNPGASAAPCCVPQTLDPLPIIYYV---GR-NVRVEQLSNMVVRACKCS 373


Search completed: September  7, 2006, 00:11:15
Job time : 40 secs
```